

STIC Search Report Biotech-Chem Library

STIC Database Tracking Number

TO: Manjunath N Rao

Location: REM-3B81&3C70

Art Unit: 1652

Wednesday, April 07, 2004

Case Serial Number: 09/246451

From: Noble Jarrell

Location: Biotech-Chem Library

Rem 1B71

Phone: 272-2556

Noble.jarrell@uspto.gov

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From:

Rao, Manjunath N.

Sent:

Tuesday, April 06, 2004 10:54 AM

To:

STIC-Biotech/ChemLib

Subject:

Sequence search request for 09/246,451

From:

Manjunath N. Rao

Art Unit 1652, Room 3B-81

Phone: 571-272-0939

Date: 4-6-04

Please search the following as soon as possible for application with serial number 09/246,451

SEQ ID NOs. 2, 11, 12, 13 and 17 against all protein databases including <u>issued patents database</u>, <u>published applications</u> and <u>pending application database</u> and provide a print of <u>all</u> results.

If you have any questions please call me at the above phone number.

Thanka

Manjusath N. Rab Art Unit 1652

Room = 8-81, Remson Bldg.

Phone 372-0939

Manjunath N. Rao Art Unit 1652, Room 3881, Mail Service Room 3070, Remsen Building, USPTO

400, Dulany St. **Alexandria**, VA. **Phone**: 571-272-0939

| Searching fourell Schreber |
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| Phone: |
| Location: |
| Date Picked Up: |
| Date Completed: ५ ११६५ |
| Searcher Prep/Review: 5 |
| Clerical: |
| Online times |

| TYPE OF SEARCH: |
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| NA Sequences: |
| AA Sequences: 5 |
| Structures: |
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| Patent Family: |
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| VENDOR/COST (where applic.) STN: |
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| DIALOG: |
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| DRLink: |
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April 6, 2004, 18:53:57; Search time 34.974 Seconds (without alignments) 3108.883 Million cell updates/sec
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Copyright (c) 1993 - 2004 Compugen Ltd.
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

| | Description | | , , , | Sequence 11, Appl | Sequence 12, App. | Sequence 13, Appl | Sequence 50, Appl | Sequence 40, Appl | sequence 37, Appl | Sequence 14997, A | Sequence 39, Appl | Sequence 39, Appl |) له | Sequence 39, Appl | Sedmence 18, Appl | Seguence 13, Appl | Sequence 18, Appl |
|-----------|--------------------------|-----------------|------------------|-------------------|-------------------|-------------------|-------------------|-------------------|----------------------|-------------------|--|-------------------|-----------------|-----------------------------------|-------------------|-------------------|-------------------|
| SUMMARIES | ID | US-10-453-104-2 | US-10-453-104-11 | US-10-453-104-12 | US-10-453-104-13 | US-10-214-446-ED | US-10-214-446-40 | 775-10-314-657-37 | TIS-10-156-741-14997 | TIS-00-861-2007 | TISHOR - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - 0 - | US-09-988-3941-39 | TIS-08-03-03-33 | 118-18-79-30 118-18-793-308-19 | TIO 301 301 10 | 03-10-201-302-13 | US-10-162-539-18 |
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| -271-889-3 | 10-156-761-837 | -10-156-761-9 | -10-214-446-3R | -10-214-446-2 | -10-156-761-1 | -10-389-647-559 | -10-156-761-991 | 0-156-761-13 | -10-214-446-4 | -10-458-201-1 | -10-214-446 | -10-214-446-2 | 0-214-446- | 10-356-751 | 7-10-10-10-01 | 10-201-213-6 | T-T9/-94T-0T | -10-214-446-1 | -10-214-446- | -10-156-761-9 | -10-214-446-2 | -10-214-446-1 | JS-10-314-657-62 | 6-761-1 | 6-46 | -10-145-415-2 | 10-205-01- | 10-203-032 | -10-145-415- | 10-145-415-1 | -10-156-761- |
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| 416 | 411 | 393 | 405 | 425 | 457 | 418 | 399 | 388 | 408 | 409 | 392 | 406 | 404 | 401 | 428 | 200 | # C | 900 | 412 | 422 | 418 | 421 | 400 | 404 | 415 | 475 | 402 | 10 | 7.0 | 429 | 8 8 8 |
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ALIGNMENTS

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US-10-453-104-2

Sequence 2, Application US/10453104

Publication No. US203030207345A1

Publication No. US203030207345A1

Publication No. US203030207345A1

APPLICANT: California Institute of Technology;

APPLICANT: France H. Arnold

APPLICANT: France H. Arnold

APPLICANT: Hyun Joo

TITLE OF INVENTION: CAygenase Enzymes and Screening Method

CURRENT FILIAG DATE: 2003-06-02

PRIOR APPLICATION NUMBER: US/10/4453,104

PRIOR APPLICATION NUMBER: US 09/641,033

PRIOR PILING DATE: 1998-02-09

PRIOR PILING DATE: 1998-02-09

PRIOR PILING DATE: 1998-07-28

PRIOR APPLICATION NUMBER: US 60/094,403

PRIOR APPLICATION NUMBER: US 60/066,206

PRIOR APPLICATION NUMBER: US 60/066,206

PRIOR PILING DATE: 1998-11-03

PRIOR PILING DATE: 1998-05-21

PRIOR PILING DATE: 1998-05-21

PRIOR PILING DATE: 1998-05-21

PRIOR PILING DATE: 1998-01-10-03

PRIOR PILING DATE: 1998-05-21

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          MPVVDKLENRIQELACSLIESLRPQGQCNFTEDYAEPFPIRIFMLLAGLPEEDIPHLKYL
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GENERAL INFORMATION:
APPLICANT: CALifornia Institute of Technology;
APPLICANT: CALifornia Institute of Technology;
APPLICANT: Frances H. Arnold
APPLICANT: Frances H. Arnold
APPLICANT: Frances H. Arnold
CHILD OF INVENTION: OXYGENASE Enzymes and Screening Method
FILE REFERENCE: 4058/1827-US3
CURRENT APPLICATION NUMBER: US 09/661,093
FRIOR APPLICATION NUMBER: US 09/661,093
FRIOR FILING DATE: 1999-02-09
FRIOR FILING DATE: 1999-02-09
FRIOR FILING DATE: 1998-07-28
FRIOR FILING DATE: 1998-11-03
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Best Local Similarity 99.5
Matches 412; Conservative
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TTETIQSNANLAPLPPHVPEHLVFDFDMYNPSNLSAGVQEAWAVLQESNVPDLVWTRCNG 60
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Pred. No. 3.3e-211;
1; Mismatches 0; Indels 5.
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CURRENT APPLICATION NUMBER: US/10/453,104
CURRENT APPLICATION NUMBER: US/10/453,104
CURRENT FILING DATE: 2003-06-02
PRIOR PILING DATE: 2003-06-02
PRIOR PILING DATE: 1999-02-09
PRIOR FILING DATE: 1999-11-03
PRIOR FILING DATE: 1998-11-03
NUMBER OF SEQ ID NOS: 19
NUMBER OF SEQ ID NOS: 19
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Sequence 11, Application US/10453164
Publication No. US20030207345A1
GENERAL INFORMATION:
APPLICANT: California Institute of Technology;
APPLICANT: Frances H. Arnold
APPLICANT: Hyun Jco
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; OTHER INFORMATION: Mutant M7-4H
US-10-453-164-11
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ORGANISM: Artificial Sequence
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Best Local Similarity 99.8*
Matches 413; Conservative
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US-10-453-104-11
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Best Local Similarity 27.6
Matches 97; Conservative
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ORGANISM: Bacterial
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US-10-214-446-50
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TOQMIRPDGSMIFABAKSALYDYLIPIIEQRRQKPGTDAISIVANGQVNGRPIISDBAKR 240
                                                                LTSDYEFHGVQLKKGDQILLPQMLSGLDERENACPMHVDFSRQKVSHTTFGHGSHLCLGQ 360
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                                   MCGLLLVGGLDTVVVVFLSFSMEFLAKSPEHRQELIERPERIPAACEELLRRFSLVADGRI
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                                                                                                                                                                               HLARREIIVTLKEWLTRIPDFSIAPGAQIQHKSGIVSGVQALPLVWDPATTKAV 414
                                                                                                                                                                                                          APPLICANT: California Institute of Technology;
APPLICANT: Frances H. Arnold
APPLICANT: Frances H. Arnold
APPLICANT: Frances H. Arnold
APPLICANT: Frances H. Arnold
APPLICANT: Hyun Joo
TITLE OF INVENTION: Oxygenase Enzymes and Screening Method
FILE REFERENCE: 4058/LE827-US3
CURRENT APPLICATION NUMBER: US/10/453,104
CURRENT FILING DATE: 2003-06-02
FRIOR APPLICATION NUMBER: US 09/661,093
FRIOR APPLICATION NUMBER: US 60/094,403
FRIOR APPLICATION NUMBER: US 60/094,403
FRIOR APPLICATION NUMBER: US 60/096,206
FRIOR APPLICATION NUMBER: US 60/066,206
FRIOR PRING DATE: 1999-11-03
FRIOR PELING DATE: 1999-11-03
FRIOR FILING DATE: 1999-11-03
FRIOR FILING DATE: 1999-11-03
FRIOR FILING DATE: 1999-11-03
NUMBER OF SEQ ID NOS: 19
SOFFWARE: FastSEQ for Windows Version 3:0
LENGHH: 414
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; Sequence 13, Application US/10453104
; Publication No. US20032207345A1
; GENERAL INFORMATION:
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301 LISDYEFHGYQLKKGDQILLPQMLSGLDERKNACPWHYDFSRQKYSHTTFGHGSHLCEGQ 360
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                                                                              361 H.ARREIIVTLKEWLTRIPDFSIAPGAQIQHKSGIVSGVQALFLVWDPATTKAV 414
                                                                                                                  Sequence 50, Application US/10214446
Publication No. US20030180742A1
GENERAL INFORMATION
JAPPLICANT: Weiner, David
APPLICANT: Weiner, David
APPLICANT: Burk, Mark J.
APPLICANT: Eitchman, Tim
APPLICANT: Eitchman, Tim
APPLICANT: Richardson, Toby
APPLICANT: Richardson, Toby
APPLICANT: Short, Jay M.
TITLE OF INVENTION: P450 ENYMES, NUCLEIC ACIDS ENCODING
TITLE OF INVENTION: THEM AND METHODS OF MAKING AND USING THEM
FILE REFERENCE: 2010-500001;
CURRENT APPLICATION NUMBER: US 60/309,497
PRIOR PILICATION NUMBER: US 60/309,497
PRIOR FILING DATE: 2001-08-03
NUMBER OF SEQ ID NOS: 59
SOFUTARE: EastSEQ for Windows Version 4.0
SEQ ID NO 50
LENGTH: 404
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Sequence 40, Application US/1021446

Publication No. US20030180742A1

GENERAL INFORMATION:
APPLICANT: Weiner, David
APPLICANT: Hitchman, Tim
APPLICANT: Eurk, Mark J.
APPLICANT: PublicAnd, Tim
APPLICANT: Public Catherine
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us-09-246-451a-2.rapb

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Sequence 14997, Application US/10156761
Publication No. US20030119018A1
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                                                                                                                           Query Match
Best Local Similarity 28.1%
Matches 110; Conservative
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                                            US-10-314-657-37
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FUBLICART 1000 W US2003017588A1
FUBLICART SHEW, Ben
APELICANT: CHENG, Y1-Oiang
APELICANT: CHENG, Y1-Oiang
APELICANT: TANG, Gong-Li
TITLE OF INVENTION: Synthases and Methods of Use
TITLE OF INVENTION: Synthases and Methods of Use
TITLE FEFENCE: 054030-12-09
TITLE FEFENCE: 054030-12-09
TITLE OF INVENTION WUMBER: US/10/314,657
CURRENT FILING DATE: 2002-12-09
FRIOR FILING DATE: 2002-03-22
PRIOR FILING DATE: 2002-03-22
PRIOR FILING DATE: 2001-03-26
NUMBER OF SEQ ID NOS: 214
SOSTWARE: PATCHILING VATER 1001-03-26
NUMBER: PATCHILING VA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       73 RAEGARHDEPROSEGRRDSGILSMDPPDHTRIRILVAKAFTMHOVEKIRPAVRELADELI 132
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      196 AKEALYDYLIPIIEQRROKPGTDAISIVANGOVNGRPITSDEAKRMCGLLLVGGLDTVVN 255
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       -----PREAGEAYDFIPTSYDPPEQRQFRALANQVVGMPVVDXLENRIQELACSLI 139
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    140 ESLRPÇG-QCNFTEDYAEPFPIRIFMLLAGLPEEDIPHLKYLIDQMTRPDGSMT---FAE 195
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          : : | : : | : | : | : | : | | : | | : : | | : : | | : : | | : : | | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : | : 
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          312 LKKGDQILLPQMLSGLDERENACPMHVDFSRQKVSHTTFGHGSHLCLGQHLARRELIVTL 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   311 TRAGEPVLVAVGAANRDPARRDAPQBLDLAREGNQHLGFGHGVHHCLGAPLARLELQEAL 370
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           31 PSNLSAGVQBAMAVLQBSNVPDLVWTRCNGGH--WIATRGQLIREAYEDYRHFSSBCPFI 88
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ---YADARLVLGDRRFS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      31;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 404;
APPLICANT: Richardson, Toby
APPLICANT: Short, Jay M.
TITLE OF INVENTION: P453 ENCYMES, NUCLEIC ACIDS ENCODING
TITLE OF INVENTION: THEM AND METHODS OF MAKING AND USING THEM
TITLE OF INVENTION: THEM AND METHODS OF MAKING AND USING THEM
CURRENT APPLICATION NUMBER: US/10/214,446
CURRENT FILING DATE: 2002-08-05
PRIOR FILING DATE: 2002-08-05
PRIOR FILING DATE: 2011-08-03
NUMBER OF SEQ ID NOS: 59
SOFTWARE: FASTEED for Mindows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            57; Mismatches 189; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   17.2%; Score 374.5; EB 14; 30.1%; Pred. No. 8e-29;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  119; Conservative
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ORGANISM: Bacterial
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US-10-314-657-37
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-----AYDFIPTSMDPPEQRQFRALANQVVGMPVVDKLENRIQELACSLIESLRPQGQ 147
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                                                                                                                                                                                                                                                                                                                                                                                260 SMEFLAKSPEHRQELIERPERIPAACEELLRRFSL---VADGRILTSDYEFHGVQLKKGD 316
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        200 LYDYLIPIIBQRRQKPGTDAISIVANGQVNGRPITSDBAKRMCGLLLVGGLDTVVNFLSF 259
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               248 MVYALLTHEDQLSLLREQPELLPRAVEELRFVPLGNGVGNARIALEDVELSGGTVRAGE 307
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                                                                                                         38 VOEAWAVLOESNVPDLVWTRCNGGHWIATRGQLIREAYEDYRHFSSECPFIPREAGE---
                                                            Gaps
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                                                      36;
                                                                                                                                                                                                                                                                                                                                            148 -CNFTEDYAEPPPIRIFMLLAGLPEEDIPHLKYLTDOMTRPDGSMTFAEAKE--
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Length 399;
                                                         Indels
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29.1%; Pred. No. 4.8e-28;
Live 56; Mismatches 181;
17.1%; Score 372; DB 14;
28.1%; Pred. No. 1.4e-28;
ilve 70; Mismatches 176;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        377 RIPDFSIA-PGAQIÇHKS-GIVSGVQALPLVW 406
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APPLICANT: IKEDA, HARUO
APPLICANT: IKEDA, HARUO
APPLICANT: ISHIKAWA, JUN
APPLICANT: SHIRA, HAROSHI
APPLICANT: SHIRA, TADAYOSHI
APPLICANT: SHIRA, TADAYOSHI
APPLICANT: SHRAKI, YOSHIYUYI
APPLICANT: SHRAKI, YOSHIYUYI
APPLICANT: HATORI, MASAHIRA
ITLE OF INVENTION: WOWEL PLYNUCLEOTIDES
FILE REFERENCE: 249-262
CURRENT APPLICATION NUMBER: US/10/156,761
CURRENT FILING DATE: 2002-05-29
PRIOR PILLING DATE: 2001-05-30
PRIOR PILLING DATE: 2001-05-30
PRIOR FILLING DATE: 2001-05-30
PRIOR FILLING DATE: 2001-08-02
NUMBER: OF SEQ ID NOS: 15109
                                                                                                                                                                21 IHPKFAELRETDPLARVRLPYGGEGWMVTR
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Patent No. US20020164742A1
              GENERAL INFORMATION:
APPLICANT: Sherman, D.H.
                                                                                                                                                                                                                                                                                                                                                     Query Match
Best Local Similarity
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                                                                                                                                                                                                                                             SEQ ID NO 39
                                                                                                                                                                                                                                                                                                                                                                                      Matches
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 174 IPHLKYLTDQWTRPDSSWTFAZAKEALYDYLIPIIEQRRQKPGTDAISIVANGQVNGRPI 233
                         181 HDFFESQSRRLLRGPGIAEVQDARAQLDDYLYALIDRKRKEPGDGLLDDLIQEQINRGTV 240
                                                                                 293
                                                                                                     241 DRABLVSLATLILLIAGHETTANMISLGTETLIRRPEQLAELRARPGLMPAAVEELL-RFL 299
                                                                                                                                          294 LVADG--RILISDYEFFGVQLKKGDQILLPQMLSGLDERENACPMHVDFSRQKVSHTTFG 351
                                                                                                                                                                  76 EDYRHFSSECPFIPREAGEAYDFIPTSMDPPEQRQFRALANQVVGMPVVDKLENRIQELA 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          136 CSLIESL--RPQGQCNFTEDYAEPFPIRIFMLLAGLPEEDIPHLKYLTDQMTRPDGSMTF 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        128 DGĽVDAMLAAPDGRADIAESLÁWPLPÍTVISELLGVPEPDRAAFRVWTDAFVFPDDPAGA 187
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                                                                                                                                                                                                              352 HGSHLCLGQHLARREIIVTLKEWLTRIPDFSI-APGAQIQHKSG-IVSGVQALPLVW 406
                                                                                                                                                                                                                                      234 TSDEAKRMCGLLLVGGLDTVVNFLSFSMEFLAKSPEHRQELIERPERIPAACEELLRRFS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            94 AEAKEALYDYLIPIIEORROKPGTDAIS-IVANGOVNGRPITSDEAKRACGLLLVGGLDI
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    188 QTAYAEMSGYLSRLIDSKRGQDGEDLISALVRTSDEDGSRLITSEELLGMAHILLVAGHET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 253 VVNFLSFSMEFLAKSPEHRQELIERPERIPAACEELLRRFSLVADGRILTSDYER----
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21; Gaps
                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Liu, H.
APPLICANT: Liu, H.
APPLICANT: Liu, H.
APPLICANT: Zhao, I.
TILL D? INVENTION: DNA encoding methymycin and pikromycin
FILE REPRENCE: 600.438US1
CURRENT APPLICATION NUMBER: US/09/861,289
CURRENT FILING DATE: 2001.05-18
PRIOR APPLICATION NUMBER: 09/105,537
PRIOR FILING DATE: 1998-06-26
NUMBER OF SEQ ID NOS: 43
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 39
LENGH: 416
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16.7%; Score 363.5; DB 9; 28.3%; Pred. No. 1.1e-27; Live 61; Mismatches 164;
                                                                                                                                                                                                                                                                                                                                        Sequence 39, Application US/09861289
Patent No. US20020110897A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      TYPE: PRT;

/ ORGANISM: Streptomyces venezuelae

US-09-861-289-39
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Best Local Similarity 28.3:
Matches 97; Conservative
                                                                                                                                                                                                                                                                                                                                                          Patent No. US20020110897A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                     US-09-861-289-39
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RESULT 10 US-09-860-846-39 ; Sequence 39, Application US/09860846

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136 CSLIESL--RPQGQCNFTEDYAEPFPIRIFMLLAGLPEEDIPHLKYLTDQMTRPDGSMTF 193
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APPLICANT: Liu, H.
APPLICANT: Xue, Y.
APPLICANT: Zhao, L.
TITLE OF INVENTION: DNA exceeding methymycin and pikromycin
FILE SEFENCE: 600.438US1
CURRENT APPLICATION NUMBER: US/09/860,846
CURRENT FILING DATE: 2001-05-18
PRIOR APPLICATION NUMBER: 09/105,537
PRIOR FILING DATE: 1998-06-26
NUMBER OF SEQ ID NOS: 43
SOFTWARE: FastSEQ for Windows Version 3.0
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| Sequence 39, Application US/09988384B |
| Publication No. US20030073824A1 |
| CENERAL INFORMATION: |
| APPLICANT: Sherman, D.H. |
| APPLICANT: Xue, Y. |
| APPLICANT: Xue, Y. |
| TITLE OF INVENTION: DNA encoding methymycin and pikromycin FILE REFERENCE: 600.536US1 |
| CURRENT APPLICATION NUMBER: US/09/988,384B |
| CURRENT FILING DATE: 1999-06-25 |
| PRIOR FILING DATE: 1999-06-25 |
| PRIOR FILING DATE: 1999-06-25 |
| PRIOR APPLICATION NUMBER: US 09/105,537 |
| PRIOR APPLICATION NUMBER: US 09/105,537 |
| SEQ ID NO 39
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28.3%; Pred. No. 1.1e-27;
Live 61; Mismatches 164;
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; ORGANISM: Streptomyces venezuelae
US-09-860-846-39
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FILE REFERENCE: 300622002121
CURRENT FEPLICATION NUMBER: US/09/793,708
CURRENT FILING DATE: 2001-02-22
PRIOR APPLICATION NUMBER: US 09/657,440
PRIOR FILING DATE: 2000-09-07
PRIOR FILING DATE: 1999-05-27
PRIOR FILING DATE: 1999-05-06-07
PRIOR FILING DATE: 1999-05-06
PRIOR FILING DATE: 1999-05-06
PRIOR FILING DATE: 1999-05-07
                                                                            366 BIIVTLKEWLTRIPDFS--IAPGAQIQHKSGIVSGVQALPLVW 406
                                                                                                          | : :: | | | | : :: || : : || : 363 EARIAVRALLERCPDLALDVSPGELVWYPNPMIRGLKALPIRW 405
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                                                                                                                                                                                       RESULT 13
US-09-793-703-018
US-09-793-703-708-18
Sequence 18, Application US/09793708
Publication No. US20030104597A1
GENERAL INFORMATION:
APPLICANT: ASHLEY, Gary
APPLICANT: BETLACH, Melanie C.
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APPLICANT: BETLACH, Melanie
APPLICANT: BETLACH, Mary C.
APPLICANT: MCDANIEL, ROBERT
APPLICANT: TANG, Li
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Best Local Similarity 28.3%
Matches 97; Conservative
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US-10-201-365-13
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                                                   Gaps
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         DB 10; Length 416;
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APPLICANT: Liu, H.
TITLE OF INVENTION: DNA encoding methymycin and pikromycin
FILE REFERENCE: 600-4384081
CURRENT APPLICATION NUMBER: 05/105,537
PRIOR FILING DATE: 2001-04-17
PRIOR FILING DATE: 1998-06-26
NUMBER OF SEQ ID NOS: 43
SOFTWARE: FastSEQ for Windows Version 3.0
                                                Indels
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                                              61; Mismatches 164;
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Pred. No. 1.1e-27;
      Score 363,5; DB
Pred. No. 1.1e-27
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    16.7%;
28.3%;
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                                              97; Conservative
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Best Local Similarity 28.33
Matches 97; Conservative
Query Match
Best Local Similarity
Matches 97; Conserv
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US-09-836-821-39
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                                                       APPLICANT: ASHLEY, Gary
APPLICANT: BETLACH, Melanie C.
APPLICANT: BETLACH, Melanie C.
APPLICANT: BETLACH, Mary
APPLICANT: BETLACH, Mary
APPLICANT: BETLACH, Mary
APPLICANT: MARCALL
APPLICANT: TANG, Li
ITILE OF INVENTION: COMBINATORIAL POLYKETIDE LIBRARIES PRODUCED USING A MODULAR
ITILE OF INVENTION: COMBINATORIAL POLYKETIDE LIBRARIES PRODUCED USING A MODULAR
ITILE OF INVENTION: WHERE: US/10/201,365
ITILE REFERENCE: 30662002.03
ICURRENT APPLICATION NUMBER: US/09/141,908
PRIOR APPLICATION NUMBER: US 09/141,908
PRIOR PLILNG DATE: 1998-08-28
PRIOR FILING DATE: 1998-06-06
NUMBER: OF SEQ ID NOS: 32
SOFTWARE: PATENTIN VET. 2.0
SEQ ID NO 13.
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APPLICANT: ASHLEY, Gary
APPLICANT: BETLACH, Melanie C.
APPLICANT: BETLACH, Mary C.
APPLICANT: BETLACH, Mary C.
APPLICANT: TANG, Li
TITLE OF INVENTION: RECCMBINANT NARBONOLIDE POLYKETIDE SYNTHASE
FILE REFERENCE: 30062200120
CURRENT APPLICATION NUMBER: US/10/160,539
PRIOR APPLICATION NUMBER: US/09/657,440
PRIOR FILING DATE: 2000-06-09
PRIOR FILING DATE: 2000-06-09
PRIOR FILING DATE: 0000-06-09
PRIOR FILING DATE: 0000-06-09
PRIOR APPLICATION NUMBER: 09/320,878
PRIOR APPLICATION NUMBER: 09/320,878
PRIOR APPLICATION NUMBER: CIP OF 09/141,908
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      21;
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Sequence 13, Application US/10201365
Publication No. US20030148469A1
GENERAL INFCRMATION:
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Publication No. US20030162262A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TYPE: PRT
ORGANISM: Streptomyces venezuelae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match
Best Local Similarity 28.3%;
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76 EDYRHESSECPFIPREAGEAYDFIPTSMDPPEQRQFRALANQVVGMPVVDKLENRIGELA 135
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                                                                                                                                                                                                                                                                                                                                                                                                                                                     128 DGLVDAMLAAPDGRADLMESLAWPLPITVISELLGVPBPDRAAFRVWTDAFVFPDDPAQA 187
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                                                                                                                                  ORGANISM: Streptomyces venezuelae
PRIOR FILING DATE: 1998-08-28
               NUMBER OF SEQ ID NOS: 34
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 18
LENGTH: 416
                                                                                                                                                                                                           Query Match
Best Local Similarity
Matches 97; Conserv
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Search completed: April 6, 2004, 19:14:29 Job time : 36.974 secs

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GenCore version 5.1.6
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procein search, using sw model OM protein

6, 2004, 18:49:16; Search time 14.9588 Seconds (without alignments) 1428.803 Million cell updates/sec April Run on:

US-09-246-451A-2 2180 1 TIBILQSNANLARIPPPPPPPF......IVSGVQALPIVWDPATIKAV 414

Title: Perfect score: Sequence:

Gapop 10.0 , Gapext 0.5 **BLOSUM62** Scoring table:

Total number of hits satisfying chosen parameters:

389414 seqs, 51625971 residues

Searched:

length: 0 length: 2000055000 Minimum DB seq Maximum DB seq

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Issued Patents AA:*
1: /cgn2_6/ptodata/2/iaa/5A_COMB.pep:*
2: /cgn2_6/ptodata/2/iaa/5B_COMB.pep:*
3: /cgn2_6/ptodata/2/iaa/6A_COMB.pep:*
4: /cgn2_6/ptodata/2/iaa/6B_COMB.pep:*
5: /cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
5: /cgn2_6/ptodata/2/iaa/backfiles1.pep:* Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| | Description | Lange of approximate | 100 | Semience 33, Appl | j c | 1787 | | | 12 | Sequence 12, Appl | 100 | 0 | - | equence 11. | 1 ~ | 5.5 | equence 8 | à | | œ | | ω, | 120 | | Politence 20 | | - 1 | œ |
|-----|----------------|----------------------|--------------|-------------------|----------|---------------|------|------------------|------------------|-------------------|-----------|-------------------|------------------|-------------------|---------|------------------|-----------|-----------|-----------------|-----------------|-----------------|-----------------|-------------------|----------------------|------------------|-----------------|--------|-----|
| | ID | US-09-320-878-18 | 09-105-537-3 | -09-141-908-1 | -657-440 | -09-252-991A- | 6-96 | US-09-385-028-12 | US-09-726-614-12 | -040 - 1 | 5212296-6 | US-08-765-907A-10 | US-08-102-863-11 | PCT-US92-10885-11 | 5-409-8 | US-09-413-814-71 | | -567-969- | US-09-568-480-8 | JS-09-568-486-8 | US-09-568-472-8 | US-09-567-899-8 | US-09-266-965-129 | US-09-252-991A-32437 | US-09-679-279-20 | US-09-096-982-5 | - 1 | ά |
| | DB | | m | 4 | 4 | ٦, | 9 | m | 4 | 4 | 9 | 4 | m | ហ | m | m | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 0 | Ŋ | 7 |
| | Length | 416 | 416 | 416 | 416 | 437 | 403 | 409 | 409 | 409 | 406 | 399 | 412 | 412 | 419 | 419 | 413 | 419 | 419 | 419 | 419 | 415 | 395 | 468 | 189 | 422 | 422 | 474 |
| οķο | Query Match | | 16.7 | 16.7 | 16.7 | | • | 15.3 | , | 15.3 | | 4 | 14.5 | 4, | | | 12.5 | | ٠ | 12.5 | ς. | 'n | | 0 | 7.8 | 7.4 | 7.4 | 7.4 |
| | Score | 63. | 363.5 | • | 363.5 | 347 | 340 | 333 | 333 | 333 | 330 | 324.5 | 316 | 316 | 271.5 | 271.5 | 271.5 | 271.5 | 271.5 | 271.5 | 271.5 | 271.5 | 261 | 233 | 169.5 | 161 | 161 | 161 |
| | Result No. | | 7 | Э | 4 | 22 | 9 | 7 | œ | σ, | 10 | 런 | 12 | ۳ ۲ | 14 | in rd | 9 | 17 | 18 | 61 | 20 | 77 | 22 | 23 | 24 | 25 | 26 | 27 |

188 QTAMAEWSGYLSRLIDSKRGQDGEDLLSALVRTSDEDGSRLTSEELLGMAHILLVAGHET 247

194 AEAKEALYDYLIPIIEQRRQKPGTDAIS-IVANGQVNGRPIISDEAKRMCGLLLVGGLDI

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| Sequence 8, Appli | 6 | Segmence 9. Appli | 2 | 2 | ı, | 'n | Sequence 4. Appli | 19 | | | | Sequence 7. Appli | 200 | } 4 | - 7 | , 4 | Sequence 7. Appli |
|-------------------|-----------------|-------------------|-----------------|-----------------|------------------|------------------|-------------------|------------------|-----------------|-----------------|-----------------|-------------------|------------------|-----------------|-------------------|-----------------|-------------------|
| US-08-653-650A-8 | US-09-036-982-9 | US-08-653-650A-9 | US-08-396-218-2 | US-08-760-116-2 | US-08-194-981E-5 | US-09-583-447A-2 | US-09-583-447A-4 | US-09-215-694-16 | US-09-144-367-2 | US-09-320-878-7 | US-09-141-908-7 | US-09-657-440-7 | US-09-105-537-22 | US-09-105-537-4 | US-09-126-420A-24 | US-08-948-554-6 | US-08-201-118-7 |
| N | N | N | -1 | -4 | N | 4 | 4 | 4 | 4 | 'n | ₩ | ਚ | m | 'n | 4 | 'n | Н |
| 474 | 443 | 443 | 422 | 422 | 512 | 503 | 504 | 516 | 503 | 382 | 382 | 382 | 402 | 3782 | 524 | 513 | 490 |
| 7.4 | 7.2 | 7.2 | 7.2 | 7.2 | 5.9 | 5.8 | 5.8 | 5. 8. | 5. 8. | 5.7 | 5.7 | 5.7 | 5.7 | 5.7 | 5.5 | 5.4 | 5.3 |
| 161 | 158 | 158 | 156 | 156 | 129 | 127.5 | 127 | 127 | 126 | 123.5 | 123.5 | 123.5 | 123.5 | 123.5 | 120.5 | 118 | 115.5 |
| 24 | on. | 0 | _ | N | m | 4 | S | G | 7 | ۵ | o. | 0 | _ | N | ~ | ₹# | 10 |

ALIGNMENTS

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136 CSLIESL--RPQGCONFTEDYAEPFPIRIFMLLAGLPEEDIPHLKYLTDQMTRPDGSMTF 193
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                                                                                     | FALCENT NO. GIT1659
| GENERAL INFORMATION:
| APPLICANT: ASHLEY, Gary
| APPLICANT: BETLACH, Melanie C.
| APPLICANT: TANG, Li
| TITLE OF INVENTION LI
| TITLE OF INVENTION LI
| TITLE OF INVENTION NUMBER: US/09/320,878A
| CURRENT PRILING DATE: 1999-05-27
| EARLIER APPLICATION NUMBER: CIP OF 09/141,908
| EARLIER FILING DATE: 1998-05-06
| EARLIER FILING DATE: 1998-05-06
| EARLIER FILING DATE: 1997-04-30
| EARLIER FILING DATE: 1997-04-30
| EARLIER FILING DATE: 1999-02-08
| EARLIER FILING DATE: 1999-02-28
| EARLIER FILING DATE: 1998-05-28
| NUMBER OF SEQ ID NOS: 34
| SOFTHARE: PATHOLITY VET. 2.0
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RESULT 1
US-09-320-878-18
; Sequence 18, Application US/09320878A
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TYPE: PRT
ORGANISM: Streptomyces venezuelae
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; ORGANISM: Streptomyces venezuelae US-09-141-908-13
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Best Local Similarity 28.34
Matches 97; Conservative
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SEQ ID NO 13
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253 VYNFLSFSMEFLAKSPEHRQELIERPERIPAACEELLRRFSLVADGRILTSDYEF---- 307
                                  248 TVNLIANGMYALLSHPOQLAALRADMILLDGAVBEMLR----YEGPVESATYRFPVBPV 302
                                                                                                303 DIDGIVIPAGDIVLVVIADABRIPERFPDPHRFDIRRDTAGHLAFGHGIHFCIGAPLARL 362
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                                                                                                                                                                                                                                                                       Sequence 39, Application US/09105537A
Fatent No. 626202
GENERAL INPORMATION:
APPLICANT: Sherman, D.H.
APPLICANT: Liu, H.
APPLICANT: Nue, Y.
APPLICANT: Nue, Y.
CURRENT FILER REFERENCE: 600.438US1
CURRENT APPLICATION NUMBER: US/09/105,537A
CURRENT FILING DATE: 1998-06-26
NUMBER OF SEQ ID NOS: 43
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 39
SEQ ID NO 39
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         16.7%; Score 363.5; DB 3; Length 28.3%; Pred. No. 3.4e-29; ive 61; Mismatches 164; Indels
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                                                                                                                                                EIIVTLKEWLTRIPDFS--IAPGAQIQHKSGIVSGVQALPLVW 406
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GENERAL INFORMATION:
APPLICANT: ASHLEY, Gary
APPLICANT: BETLACH, Melanie C.
APPLICANT: BETLACH, Mary
APPLICANT: MCDANIE, Robert
APPLICANT: TANG, Z.
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TYPE: PRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    --HGVQLKKGDQILLPQMLSGLDERENACPMHVDFSRQKVSHTTFGHGSHLCLGQHLARR 365
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        Combinatorial Polyketide Libraries Produced Using a
Modular PKS Gene Cluster as Scaffold
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   188 QTAMAEMSGYLSRLIDSKRGQDGEDLLSALVRTSDEDGSRLTSEELLGMAHILLVAGHET
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             253 VVNFLSFSMEFLAKSPEHRQELIERPERIPAACBELLRRFSLVADGRILTSDYEF----
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ASHLEY, Gary

APPLICANT: BETLACH, Melanie C.

APPLICANT: BETLACH, Melanie C.

APPLICANT: BETLACH, Robert

APPLICANT: TANG, Li

TITLE OF INVENTION: RECOMBINANT NARBONDLIDE POLYKETIDE SYNTHASE

FILE REFERENCE: 30062200120

CURRENT APPLICATION NUMBER: US/09/657,440

CURRENT PILING DATE: 1999-08-27

PRIOR FILING DATE: 1999-08-27

PRIOR FILING DATE: 1999-08-27

PRIOR FILING DATE: 1999-08-28

NUMBER OF SEQ ID NOS: 34

SOFTWARE: Patentin Ver. 2.0

SEQ ID NO 18

TYPE: PRI
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Score 363.5; DB 4;
Pred. No. 3.4e-29;
61; Mismatches 164;
TITLE OF INVENTION: Combinatorial Polyketide Libbiting of INVENTION: Modular PKS Gene Cluster as it FILE PRENENCE: 300622002100
CURRENT APPLICATION NUMBER: US/09/141,908
CURRENT FILING DATE: 1998-08-28
EARLIER APPLICATION NUMBER: CIP OF 09/273,538
EARLIER FILING DATE: 1998-05-06
EARLIER APPLICATION NUMBER: CIP OF 08/46,247
EARLIER APPLICATION NUMBER: CIP OF 08/646,247
EARLIER APPLICATION NUMBER: PROV. 60/076,919
EARLIER PRILING DATE: 1998-03-05
EARLIER PRILING DATE: 1998-03-05
EARLIER FILING DATE: 1998-03-05
EARLIER FILING DATE: 1998-05-28
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289 PNAMEELVRHDSPVRASMLRFTVEDVELDGVTIPAGENILVSNLTANHDAERFDDPDRLD 348
                                                                                                                     340 ESROKVSHTTFGHGSHLCLGQHLARREIIVTLKEWLTRIPDFSIA-PGAQIQHKSGIVSG 398
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                                  282 PAACEELLRRFSLVADG--RILTSDYEFHGVOLKKGJQILLPQMLSGLBERENACPMHVD 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63 WINTRGOLIREAYEDYRHFSSEC----PFIPREAGEAYDFIPT--SMDPPEQROFRALLA 115
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                16 NOVVGMPVVDKLENRIQELACSLIESLRP-QGQCNFTEDYAEPFPIRIFMLLAGLPEDI 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          171 AFFQERSRVLLTLRSTPE---EVRAQDELLEYLARLARTKRERPDDAIISRLVARGELD 227
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              RYLTIVHNGVPRIATEDVLIGGRTIAAGEGVLC--MISSANRDAEVFPGGDDLDVARDAR 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        341 RHVAFGFGVHQCLGQPLARVELQIAIETLIRRLPDLRLAVHEEIPFRGDMAIYGVHSLP 400
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  52 WIVTRHODVRAVIGDPR-FSADAHRIGFPFITAGGREIIGINPTFIRMDDPEHARLRRML
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       346 SHTTFGHGSHLCLGQHLARREIIVTLKEWLTRIPDFSIA-PGAQIQHKSGL-VSGVQALP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             230 GRPITSDEAKRMCGLLLVGGLDTVVNFLSFSMEFLAKSPEHRQELIERPERIPAACEELL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      228 OTQIAT-----MGRLLLVAGHETTANMIRLSTLVLLRNPDQLARLRAEPALVKGAVEBLL
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  290 RRFSLVADG--RILTSDYEFHGVQLKKGDQILLPQMLSGLDERENACP--MHVDFSRQKV
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                                                                                                                                                     KENNETH
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                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: DEAN, CAROLINE; HARDER, PATRICIA A.; LETO, KENNI; J.O. YEREP, DANIEL P.; OWER, CHARLES A.; ROMESSER, JAMES A.
TITLE OF INVENTION: EXPRESSION OF HERBICIDE METABOLIZING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      15.6%; Score 340; DB 6; L. 28.9%; Pred. No. 9.2e-27; ive 63; Mismatches 165;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NUMBER OF SEQUENCES: 19
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/569,781
FILING DATE: 23-AUG-1990
FRIOR APPLICATION DATE:
APPLICATION NUMBER: 464,499
FILING DATE: 12-JAN-1990
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Patent No. 6232106
GENERAL INFORMATION:
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FILING DATE: 11-SEP-1989
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Best Local Similarity 28.99
Matches 105; Conservative
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US-09-385-028-12
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;Patent No.
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APPLICANT: Marc J. Ruberfield et al.
APPLICANT: Marc J. Ruberfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPBUTICS
CURRENT APPLICATION NUMBER: US/09/252,991A
PRIOR RELING DATE: 1999-02-18
PRIOR RELING DATE: 1998-02-18
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 1836
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                                                                                                                                                   76 BOYRHFSSECPFIPREAGEAYDFIPTSMDPPEQROFRALANQVVGMPVVDXLENRIQELA 135
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                                                                                                                                                                                          KDWR--NSTIPLIEAEAALNHNMLES--DPRHTRLRKLVAREFTWRRVBLLRPRVQETV 127
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          --HGVQLKKGDQILLPQMLSGLDERENACPMHVDFSRQKVSHTTFGHGSHLCLGQHLARR 365
                                                                                                                                                                                                                                                                           303 DIDGIVIPAGDIVLVVLADARRIPERFEDPHREDIRRDTAGHLAFGHGIHFCIGAPLARL 362
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                                                                                                                                                                                                                                                                                                                                                         188 CTAMAEMSGYLSRLIDSKRGODGEDLISALVRISDEDGSRLISEELLGMASILLVAGHET
                                                                                                                                                                                                                                                                                                                           194 AEAKEALYDYLIPIIEQRRQXPGTDAIS-IVANGQVNGRPITSDEAKRMCGLLLVGGLDT
                                                                                                                                                                                                                                                                                                                                                                                                                   253 VVAFLSFSMEFLAKSPEHROELTERPERIPAACEELLRRFSLVADGRILTSDYEF----
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                                                              16.7%; Score 363.5; DB 4; Length
28.3%; Pred. No. 3.4e-29;
Live 61; Mismatches 164; Indels
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25.5%; Pred. No. 1.9e-27;
Mismatches 160;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 17836, Application US/09252991A
Patent No. 6551795
ORGANISM: Streptomyces venezuelae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-17836
                                                                                                         97; Conservative
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                                                                                     Local Similarity
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      ; OKGANISM: 5L.
US-09-657-440-18
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Matches 9
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352 HGMHQCLGQWLARVELEEILAAVIRWM---PGARLAVPFEELDFRHEVSSYGLGALPVTW 408
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63 LGDRRFTAVTSAPGFPMLTRTSQLVRANPESASFI--RMDDPQHSRLRSMLTRDFLARRA 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            119 VGM-PVVDKLENRIQELACSLIESLRPQGQCNFTEDYAEPFPIRIFMLLAGLPEEDIPHL 177
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     14 PAYPMHRVCPVD---PPPQLAGLRSQKAASRVT----LW---DGSQVWLVTSHAGARAV 62
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        16 PHVPEHLVFDFDMYNPSNLSAGVQEAWAVLQESNVPDLVWTRCNGGH-WIATRGQLIREA
                                                                                                                                                                                                                                                                           APPLICANT: Susan E. Jensen
APPLICANT: Kwamena A Aidoo
APPLICANT: Ashish S. Paradkar
TITLE OF INVENTION: DNA Sequence Encoding Enzymes of Clavulanic
Patent No. 6514735
TITLE OF INVENTION: Acid Biosynthesis
NUMBER OF SEQUENCES: 25
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    54;
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The Jenifer Buliding, 400 Seventh Street, N.W.
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29.0%; Pred. No. 5e-26;
live 60; Mismatches 185;
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/790,462
FILING DATE: 29-JAN-1997
ATTORNEY/AGENT INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/726,614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               IBM PC compatible
YSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                              Sequence 12, Application US/09726614
Patent No. 6514735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            NAME: D. Douglas Price
REGISTRATION NUMBER: 24,514
REFRENCE/DOCKET NUMBER: 1418
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202 638-666
TELEX: RCA 246591 IDEA UR
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             STATE: D.C.
COUNTRY: U.S.A.
ZIP: 20004
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
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Best Local Similarity 29.0
Matches 122; Conservative
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ADDRESSEE: JACOBSON,
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OPERATING SYSTEM:
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STRANDEDNESS: si
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                                                      D 407
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16 PHVPEHLVFDFDMYNPSNLSAGVQEAWAVLQESNVPDLVWTRCKGGH-WIATRGQLIREA
                APPLICANT: Kwamena A Aidoo
APPLICANT: Ashish S. Paradkar
TITLE OF INVENTION: DNA Sequence Encoding Enzymes of Clavulanic
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                                                                                                                                                                                                  The Jenifer Buliding, 400 Seventh Street, N.W.
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                                                                                                                                                                             JACCBSON, PRICE, HOLMAN & STERN, PPLC
                                                                                                                                                                                                                                                                                                                                                                                                  SCFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATICN DATA:
APPLICATION NUMBER: US/39/385,028
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CLASSIFICATION:
PRIOR APPLICATION NUMBER: US 08/790,462
APPLICATION NUMBER: US 08/790,462
FILING DAIE: 29-JAM-1997
ATTORNEY, GENTI INFORMATION:
NAME: D. DOUGLAS PRICE
REGISTRATION NUMBER: 24,514
REPERENCE/DOCKET NUMBER: 1418/P57452US2
TELECHONEY, INFORMATION:
TELEPHONE: (202 638-6666
TELEFAX: (202) 39305350
TELEFAX: (202) 39305350
TELEFAX: (A02) 39305350
TELEFAX: (A02) 39305350
TELEFAX: (A03) NO: 12: SEQUENCE CHARACTERISTICS:
LENGTH: 409 amino acids
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15.3%; Score 333; DB 3
Best Local Similarity 29.0%; Pred. No. 5e-26;
Matches 122; Conservative 60; Mismatches 1
                                                                                                     TITLE OF INVENTION: Acid Biosynthesis
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
ADDRESSEE: JACCESON, PRICE, HOLMAN
                                                                                                                                                                                                                                                                                                          COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
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APPLICANT:
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BARRIERE, Jean-Claude
DEBUSSCHE, Laurent
FAMECHON, Alain
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COUZET, Joel
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104; Conserv
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409 Z 409
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US-08-765-907A-10
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Best Local S
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APPLICANT:
APPLICANT:
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APPLICANT:
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EDRSAVLIDRGYTPE---QVAKARDELDGYLRELVEERIENPGTDLISRLVIDQVRPGHL 231
                               TSDEAKRMCGLLLVGGLDTVVWFLSFSWEFLAKSPEHRQELIBRPERIPAACBELLRRFS 293
                                                            RWBBMVPMCRLLLVAGHGTTTSQASLSLLSLLTDPELAGRLTEDPALLPKAVBELLAFRHS 291
                                                                                                      351
                                                                                                                     352 HGSHLCLGQHLAR---REIIVTLKEWLTRIPDFSIA-PGAQIQHKSGIVS-GWQALPLVW 406
                                                                                                                                                                                     352 HGMHQCLGQMLARVELEEILAAVLRWM---PGARLAVPFEELDFRHEVSSYGLGALDVTW 408
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             352 HGMHQCLGQWLARVELEEILAAVLRWM---FGARLAVPFEELDFRHEVSSYGLGALPVTW 408
                                                                                              LVADG--RILISDYBEHGVQLKKGDQILLPQMLSGLDERENACPMHVDFSRQKVSHTTEG
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APPLICANT: Jonsen, Kwamena A
APPLICANT: Baidoo, Kwamena A
APPLICANT: Baidoo, Kwamena A
APPLICANT: Baidoo, Kwamena A
APPLICANT: Baidoo, Kwamena A
TITLE OF INVENTION: DNA SEQUENCE ENCODING ENZYMES OF CLAVULANIC ACID
TITLE OF INVENTION: BICSYNTHESIS
TILE PEPERENCE: 09/385,040
CURRENT APPLICATION NUMBER: US/09/385,040
PRIOR APPLICATION NUMBER: US 08/790,462
PRIOR FILLING DATE: 1997-01-29
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Patent No. 6589775
GENERAL INFORMATION:
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SEQ ID NO 12
LENGTH: 409
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Best Local Similarity
Matches 122; Conserv
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                                 KENNETH
                                                                                                                                                                                                                                                                                                                                                                                             Length 406;
                                                              ; TEPPERMAN, JAMES M.

TITLE OF INVENTION: EXPRESSION OF HERBICIDE METABOLIZING; CYTOCHROMES
Patent No. 5212296

APPLICANT: DEAN, CAROLINE; HARDER, PATRICIA A.; LETO, 37.; O'KEEFE, DANIEL P.; OMER, CHARLES A.; ROWESSER, JAMES
                                                                                                                                                                                                                                                                                                                                                                                                                                193;
                                                                                                                                                                                                                                                                                                                                                                                     15.1%; Score 330; DB 6;
26.3%; Pred. No. 1e-25;
Live 74; Mismatches 193.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         APPLICATION NUMBER: US/07/569,781
FILING DATE: 23-AUG-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 464,499
FILING DATE: 12-AN-1990
APPLICATION NUMBER: 405,605
FILING DATE: 11-SEP-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence 10, Application US/08765937A
Patent No. 6352839
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        GREERAL INFORMATION:
APPLICANT: BLANC, Veronique
APPLICANT: THIBAUT, Denis
APPLICANT: BAMAS-JANQUES, Nathalie
                                                                                                                                          CURRENT APPLICATION DATA:
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                                                                                                                      NUMBER OF SEQUENCES:
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US-08-102-863-11
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COUNTRY:
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APPLICANT: PARIS, Jean-Marc
APPLICANT: DATRUC-ROSSET, Gilles
TITLE OF INVENTION: Streptogramins And Method For Preparing Same J
TITLE OF INVENTION: Streptogramin genes
FILE REFERENCE: Streptogramin genes
CURRENT APPLICATION NUMBER: US/08/765,907A
CURRENT FILING DATE: 1997-03-20
SUFTREN PALENT NO 10
LENGTH: 399
                                                                                                                                                                                                                                                                                                       41;
                                                                                                                                                                                                                                                                     Length 399;
                                                                                                                                                                                                                                                                     DB 4;
                                                                                                                                                                                                                                                             14.9%; Score 324.5; DB 4.29.0%; Pred. No. 3.7e-25; Dive 59; Mismatches 159
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Fatent No. 5466590
GENERAL INFORMATION:
TITLE OF INVENTION: CONSTITUTIVE
TITLE OF INVENTION: EXPRESSION OF P450SOY
TITLE OF INVENTION: STREPTOMYCES
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                       TYPE: PRT ORGANISM: Streptomyces pristinaespiralis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: E. I. DU PONT DE NEMOURS
ADDRESSEE: AND COMPANY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       COMPUTER: IBM PC Compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: Patenth P.1.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Patentin Release #1.0,
Version #1.25
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MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                74 AYEDYRH---
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103 MDPPEQRQFRALANGVVGMPVVDKLENRIQELACSLIESLRPQG-QCNFTEDYAEPFPIR 161
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Mismatches 163; Indels
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TITLE OF INVENTION: CONSTITUTIVE
TITLE OF INVENTION: EXPRESSION OF P450SOY
TITLE OF INVENTION: AND FERREDOXIN-SOY IN
TITLE OF INVENTION: STREEPTOMYCES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   E. I. DU PONT DE NEMOURS
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/807,001
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette, 3.50 inch,
MEDIUM TYPE: 1.0 MB
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GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    14.5%; Scor
27.2%; Pred
                                                                                                                                                                                                                  32,692
                                                                                                                                                                                                                                                     TELECOMMUNICATION INFORMATION: 302-892-7342
                                                                                                                                                                                                                                                                                                                   INFORMATION FOR SEQ ID NO: 11:
                                                                                                                                           FILING DATE:
ATTORNEY AGENT INFORMATION:
NAME: GALLEGOS, R. THOMAS
REGISTRATION NUMBER: 32,63
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             1007 MARKET STREET
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                                                                                                                                                                                                                                                                           302-892-7342
302-892-7949
                                                                                                                                                                                                                                                                                                                                                             : 412 amino acids
amino acid
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                                                                                                                                                                                                                                                                                                                                                                                                            unknown
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MOLECULE TYPE: protein
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Ferent No. 6121029
GENERAL INCOMATION
APPLICANT: Schupp, Ttomas
APPLICANT: Ligon, James
APPLICANT: Ligon, James
APPLICANT: Algon, James
APPLICANT: Social acc, Joern
APPLICANT: Social acc, Joern
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APPLICANT: Social acc, Joern
FILE REFERENCE: 4.3C52A
CURRENT APPLICATION NUMBER: US/09/335,409
CURRENT FILING DATE: 1993-06-17
NUMBER OF SEQ ID NOS: 3.0
SOFFWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                      Query Match
14.5%; Score 316; DB 5; Length 412;
Best Local Similarity 27.2%; Pred. No. 3e-24;
Matches 84; Conservative 56; Mismatches 163; Indels
                         0.9
COMPUTER: Macintosh
OPERATING SYSTEM: Macintosh System,
SOFTWARE: Microsoft Word, 4.0
CURBEN APPLICATION DATA:
APPLICATION NUMBER: PCT/US92/10885
FILING DATE: 19921216
                                                                                                                                                                                        CR-9000-A
                                                                                                      CLASSIPICATION:
ATTORNEY/AGENT INFORMATION:
NAME: GALLEGOS, R. THOMAS
REGISTRATION NUMBER: 32,692
REFERENCE/DOCKET NUMBER: CR-5
TELECOMMUNICATION INFORMATION:
TELEPHONE: 302-892-7342
                                                                                                                                                                     32,692
                                                                                                                                                                                                                                       TELEFAX: 302-892-7949
INFORMATION FCR SEQ ID NO: 11:
SEQUENCE CARRACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TYPE: PRT
ORGANISM: Sorangium cellulosum
                                                                                                                                                                                                                                                                                                LENGTH: 412 amino acids TYPE: AMINO ACID
                                                                                                                                                                                                                                                                                                                                     unknown
                                                                                                                                                                                                                                                                                                                                               TOPOLOGY: unknown
MOLECULE TYPE: protein
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                                                                                                                                                                                                                                                                                           LENGTH:
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LENGIH: 419
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APPLICANT: BOOCKET, STEELAN
APPLICANT: BLOCKET, Helmut
APPLICANT: Blocker, Fetra
APPLICANT: Brandt, Petra
APPLICANT: Cougherty, Brian A
APPLICANT: Cougherty, Brian A
APPLICANT: Coldberg, Steven L
APPLICANT: Moller, Joachim
APPLICANT: Meichenbach, Hans
TITLE OF INVENTION: DNA Sequences for enzymatic synthesis of polyketide or
TITLE OF INVENTION: DNA Sequences for enzymatic synthesis of polyketide or
TITLE OF INVENTION: Petreropolyketide compounds
TITLE OF INVENTION: DNA Sequences
TITLE OF STATION NUMBER: US/09/413,814
CURRENT APPLICATION NUMBER: US/09/413,814
CURRENT FILING DATE: 1999-10-07
EARLIER FILING DATE: 1999-10-09
NUMBER: OF SEQ ID NOS: 107
                                                                                                                                                                                                                              62 HWIATRGQ------LIRBAYEDYRHFSSECPFIPREAGEAYDFIPTSMDPEQR 109
                                                                                                                                                                                                                                                                                                                                           110 OFRALANQVVGMPVVDKLENRIQELACSLIESLRPQGQCNFTEDYAEPPPIRIFMLLAGL 169
                                                                                                                                                                                                                                                                                          ----ELSDMKKYGLFGLPPEDHA 184
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   113 LDERRRNPLENDVLTWLLQAEADGSRLSTKELVALVGAIIAAGTDTTIYLIAFAVLNLLR 272
                                                                                                                                                                  3 QEQANQSETKP-----AFDFKPFAP-----GYAEDPFPAIERLREA-TPIFYWD--EGR 48
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                                                                                                            6 CSNANLAPLPPHVPEHLVFEFDMYNPSNLSAGVQE----AWAVLQESNVPDLVWTRCNGG 61
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APPLICANT: Bristol-Myers Squibb, Co.
APPLICANT: Beyer, Stefan
                                                               Indels
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Query Match 12.5%; Score 271.5; DB 3; Best Local Similarity 23.8%; Pred. No. 1.4e-19; Matches 100; Conservative 67; Mismatches 179;
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Patent No. 6225064
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US-09-413-814-71
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Matches 100; Conservative
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110 OFFALANQVVGMPVVDKLENRIQELACSLIESLRPQGQCNFTEDYAEPFPIRIFMLLAGL 169
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6 OSNANLAPLPPHVPEHLVFDFEMYNPSNLSAGVQE----AWAVLQESNVPDLVWTRCNGG 61
                                                        3 QEQANQSETKP-----AFDFKPFAP-----GYAEDPFPAIERLREA-TPIFYWD--BGR 48
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Search completed: April 6, 2004, 18:55:57 Job time : 16.9588 secs

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April 6, 2004, 18:53:57; Search time 34:974 Seconds (without alignments) 3108.883 Million cell updates/sec
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| Carl E | Cytodata | Jubpaa | USO7 PUBCOMB.pep:*
| Carl E | Cytodata | Jubpaa | USO7 PUBCOMB.pep:*
| Carl E | Cytodata | Jubpaa | USO6 PUBCOMB.pep:*
| Carl E | Cytodata | Jubpaa | USO6 PUBCOMB.pep:*
| Carl E | Cytodata | Jubpaa | PUBCOMB.pep:*
| Carl E | Cytodata | Jubpaa | USO8 PUBCOMB.pep:*
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| Carl E | Cytodata | Jubpaa | USO9 PUBCOMB.pep:*
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| Carl E | Cytodata | Jubpaa | USO8 PUBCOMB.pep:*
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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1071772 seqs, 262633353 residues
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Post-processing: Minimum Match 08
Maximum Match 100%
Listing first 45 summaries
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                                                                                                                                              OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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Perfect score:
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                                                                                                                                                                                                                    Run on:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

| | Description | TARK LE GORDINGS | Sections 2 April | Sequence 17 Appli | Semience 12, Appl | Sequence to, Appt | , 0 | | Someone 37, Appli | Company 20 April | Somionee 39, Appl | Commence 33, Appr | ער | 39, | Seguence 18, Appl | Seguence 13. April | Seguence 18, Appl |
|-----------|--------------------------|------------------|------------------|-------------------|-------------------|-------------------|------------------|------------------|---------------------|------------------|-------------------|-------------------|------------------|-----------------|-------------------|--------------------|-------------------|
| SUMMARIES | ID | US-10-453-104-11 | US-10-453-104-2 | US-10-453-104-12 | US-10-453-184-13 | US-10-214-446-50 | US-10-214-446-40 | US-10-314-657-37 | US-10-156-761-14997 | US-09-861-289-39 | US-09-860-846-39 | US-09-988-3848-39 | HG-09-836-801-38 | TO 00 101 00 11 | 8T-80/-66/-60-00 | US-10-201-365-13 | US-10-160-539-18 |
| | | 151 | τ.† | 15 | 15 | 14 | 14 | 14 | 4 | Ó | 0 | 10 | | 9 6 | 9 | 14 | 14 |
| | Query Match Length DB | 414 | 414 | 414 | 414 | 404 | 404 | 399 | 416 | 416 | 416 | 416 | 416 | 917 | 7 | 416 | 416 |
| æ | Query | 100.0 | 8,66 | 99.7 | 99.5 | 17.3 | 17.3 | 17.1 | 16.8 | ₹6.8 | 16.8 | 16.8 | 16.8 | 9.01 | | φ. | 16.8 |
| | Score | 2180 | 2176 | 2173 | 2169 | 377.5 | 376.5 | 372 | 367 | 365.5 | 365.5 | 365.5 | 365.5 | 365.5 | 11 | 365.5 | 365.5 |
| | Result No. | - | 2 | e | v | Ŋ | 9 | 7 | æ | 6 | 10 | 11 | 12 | , | | r i | 15 |

| Segmence 39. April | 8376 | Semience 9525 An | 1 00 | 20 | Sequence 11073. p | Sequence 9914 An | Seguence 559. App | Sequence 13776. A | Sequence 4. Appli | Sequence 12. April | Sequence 32, April | Sequence 2. Appli | Sequence 8730. An | Segmence 16. April | Sequence 14. April | Sequence 6. Appli | Sequence 14659 A | Segmence 36. April | Seguence 9703. An | Seguence 22. Appl | | ٠. | equence | equence | _ | equence | , equente | , 4 | Sequence 7959, Ap |
|--------------------|--------------------|--------------------|------------------|------------------|---------------------|--------------------|-------------------|---------------------|-------------------|--------------------|--------------------|-------------------|--------------------|--------------------|--------------------|-------------------|---------------------|--------------------|--------------------|-------------------|------------------|---------------------|------------------|------------------|-----------------|------------------|-----------------|--------------------|-------------------|
| US-10-271-889-39 | US-10-156-761-8376 | US-10-156-761-9525 | US-10-214-446-38 | US-10-214-446-20 | US-10-156-761-11073 | US-10-156-761-9914 | US-10-389-647-559 | US-10-156-761-13776 | US-10-214-446-4 | US-10-458-201-12 | US-10-214-446-32 | US-10-214-446-2 | US-10-156-761-8710 | US-10-214-446-16 | US-10-214-446-14 | US-10-201-213-6 | US-10-156-761-14659 | US-10-214-446-36 | US-10-156-761-9703 | US-10-214-446-22 | US-10-214-446-18 | US-10-156-761-10431 | US-10-214-446-46 | US-10-314-657-62 | US-10-205-032-8 | US-10-145-415-22 | US-10-145-415-6 | US-09-738-626-4117 | 3-10-156-761-7 |
| 14 | 14 | 14 | 14 | 14 | 14 | 14 | 12 | 14 | 14 | 15 | 14 | 14 | 14 | 14 | 74 | | | | | 14 | | 14 | 14 | | 14 | 74 | 74 | o, | 74 |
| 416 | 411 | 393 | 405 | 425 | 457 | 399 | 418 | 388 | 408 | 409 | 392 | 406 | 401 | 404 | 396 | 428 | 404 | 412 | 421 | 418 | 421 | 404 | 415 | 400 | 402 | 475 | 470 | 430 | 399 |
| | | | | | | | | 15.7 | 15.5 | 15.3 | 15.2 | 18.1 | 14.8 | 14.7 | 14.6 | 14.6 | 14.6 | 14.4 | 14.4 | 14.4 | 14.1 | 14.0 | 13.9 | 13.8 | 13.7 | 13.7 | 13.6 | 13.6 | 13.5 |
| 365.5 | 363.5 | 358 | 357 | 356 | 354.5 | 351.5 | 350 | 341.5 | 338.8 | 333 | 332 | 328.5 | 322 | 321 | 318.5 | 318 | 317.5 | 315 | 315 | 314 | 307 | 304.5 | 302.5 | 301.5 | 298.5 | 298 | 297 | 295.5 | 295 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 32 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 4,4 | 45 |

ALIGNMENTS

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FILE REFERENCE: 4059/1827.03

APPLICANT: Frances H. Arnold
APPLICANT: Frances H. Arnold
APPLICANT: Frances H. Arnold
APPLICANT: Hyun Joo
TITLE OF INVENTION: Oxygenase Enzymes and Screening Method
FILE REFERENCE: 4053/18827-US3
CURRENT FAPLICATION NUMBER: US/10/453,104
CURRENT FILING DATE: 2003-06-02
PRIOR APPLICATION NUMBER: US 09/661,033
PRIOR APPLICATION NUMBER: US 09/246,451
PRIOR APPLICATION NUMBER: US 60/094,403
PRIOR FILING DATE: 1998-02-09
PRIOR FILING DATE: 1998-02-09
PRIOR FILING DATE: 1998-02-05
PRIOR FILING DATE: 1998-05-21
PRIOR PRIOR APPLICATION NUMBER: US 60/106,840
PRIOR FILING DATE: 1998-05-21
PRIOR FILING DATE: 1998-05-21
PRIOR FILING DATE: 1998-05-21
PRIOR FILING DATE: 1998-11-03
NUMBER OF SEQ ID NOS: 19
COFT TO NO 11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Query Match
100.0%; Score 2180; DB 15;
Best Local Similarity 100.0%; Pred. No. 7.1e-212;
Matches 414; Conservative 0; Mismatches 0;
                         Sequence 11, Application US/10453104
Publication No. US20030207345A1
GENERAL INFORMATION:
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US-10-453-104-11
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US-10-453-104-11
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LENGTH: 414
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Length 414;

| Cy 121 MPVVDKLENRIQELACSLIESIRPOGCONFTEDYALEFPIRIFMILAGLPEEDIPHLKYL 180 121 MPVVDKLENRIQELACSLIESIRPOGCONFTEDYALEFPIRIFMILAGLPEEDIPHLKYL 180 121 MPVVDKLENRIQELACSLIESIRPOGCONFTEDYALEFPIRIFMILAGLPEEDIPHLKYL 180 CY 181 TDOMTRPDGSMTFAEAKEALYDYLIPIIEORROKEGTDAISIVANGGVNGRPITSDEAKR 240 Db 181 TDOMTRPDGSMTFAEAKEALYDYLIPIIEORROKEGTDAISIVANGGVNGRPITSDEAKR 240 CY 241 MCGLLLVGGLDTVVNFLSFSMEFLAKSPEHRQELIERPERIPAACEELLRRFSLVADGRI 300 L | Cy 361 HLARREIIVTLKEWLTRIDDFSIAPGAQIQHKSGIVSGVQALPLVWDPATTKAV 414 Db 361 HLARREIIVTLKEWLTRIDDFSIAPGAQIQHKSGIVSGVQALPLVWDPATTKAV 414 RESULT 3 US-10-453-104-12 ; Sequence 12, Application US/10453104 ; Publication No. US20030207345A1 ; GENERAL INFORMATION: ; APPLICANT: California Institute of Technology; ; APPLICANT: Frances H. Arnold | APPLICANT: HYDIN ON ON SERIOR BIDDYLES and Screening Method FILE REFERENCE: 4058/1E87-US3 CURRENT APPLICATION NUMBER: US/10/453,104 CURRENT FILING DATE: 2000-06-02 PRIOR APPLICATION NUMBER: US 60/661,093 PRIOR PRIOR APPLICATION NUMBER: US 60/094,403 PRIOR APPLICATION NUMBER: US 60/094,403 PRIOR PRIOR APPLICATION NUMBER: US 60/094,403 PRIOR FILING DATE: 1999-02-09 PRIOR FILING DATE: 1999-02-09 PRIOR FILING DATE: 1999-02-09 PRIOR FILING DATE: 1999-01-03 PRIOR PRIOR APPLICATION NUMBER: US 60/106,840 PRIOR PRIOR APPLICATION NUMBER: US 60/106,840 PRIOR PRIOR APPLICATION NUMBER: US 60/106,834 PRIOR FILING DATE: 1998-11-03 PRIOR PRIOR APPLICATION NUMBER: US 60/106,834 PRIOR FILING DATE: 1998-11-03 PRIOR FILING DATE: 1998-11-03 PRIOR APPLICATION NUMBER: US 60/106,834 PRIOR FILING DATE: 1998-11-03 PRIOR APPLICATION NUMBER: US 60/106,834 PRIOR FILING DATE: 1998-11-03 PRIOR FILING DATE: 1998-11-03 PRIOR APPLICATION NUMBER: US 60/106,834 PRIOR FILING DATE: 1998-11-03 PRIOR PRIOR APPLICATION NUMBER: US 60/106,834 PRIOR APPLICATION NUMBER: US 60/106,834 PRIOR FILING DATE: 1998-11-03 PRIOR PRIOR PRIOR DATE: 1998-11-03 PRIOR PRIOR PRIOR DATE: 1998-11-03 PRIOR PRIOR PRIOR DATE: 1998-11-03 PRIOR PRIOR PRIOR DATE: 1998-11-03 PRIOR PRIOR PRIOR DATE: 1998-11-03 PRIOR PRIOR PRIOR DATE: 1998-11-03 PRIOR PRIOR PRIOR DATE: 1998-11-03 PRIOR PRIOR PRIOR DATE: 1998-11-03 PRIOR PRIOR PRIOR DATE: 1998-11-03 PRIOR PRIOR PRIOR DATE: 1998-11-03 PRIOR PRIOR PRIOR DATE: 1998-11-03 PRIOR PRIOR PRIOR DATE: 1998-11-03 PRIOR PRIOR PRIOR DATE: 1998-11-03 PRIOR PRIOR PRIOR DATE: 1998-11-03 | Query Match 99.7%; Score 2173; DB 15; Length 414; Best Local Similarity 99.8%; Pred. No. 3.6e-211; Additional and the construction of the constructi | 61 GHWIATRGOLIREAYEDYRHESSECPFIPREAGRAYDFIPTSMDPPBQRQFRALANQVVG |
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| CY TTETICSNANLAPLPPHVPEELVEDEDMYNPSNLSAGVOEAWAVLOESNVPDLVWTRCNG 60 DD 1 TTETICSNANLAPLPPHVPEHLVETEDMYNPSNLSAGVOEAWAVLOESNVPDLVWTRCNG 60 LTETICSNANLAPLPPHVPEHLVETEDMYNPSNLSAGVOEAWAVLOESNVPDLVWTRCNG 60 CY GHWIATRGOLIREAYEDYHPSSECPFIPPEAGEAYDFIPTSMDFPEGROFFALANOVVG 120 61 GHWIATRGOLIREAYEDYHPSSECPFIPPEAGEAYDFIPTSMDFPEGROFFALANOVVG 120 CY 121 MPVVDKLENRIQELACSLIESLRPQGQCNFTEDYABPFPIRIFWLLAGLPEEDIPHLKYL 180 DD 121 MPVVDKLENRIQELACSLIESLRPQGQCNFTEDYABPFPIRIFWLLAGLPEEDIPHLKYL 180 CY 181 TDOWTRPDGSMTFAEAKEALYDYLIPIIEORRQKFGTDAISIVANGQVNGRPITSDEAKR 240 DD 121 MDWTRFDGSMTFAEAKEALYDYLIPIIEORRQKFGTDAISIVANGQVNGRPITSDEAKR 240 | OY 241 MCGLILVGGLDTVVNFLSFSMEFLAKSPEHRQELIERPERIPAACEELLRRFSLVADGRI 300 241 MCGLILVGGLDTVVNFLSFSMEFLAKSPEHRQELIERPERIPAACEELLRRFSLVADGRI 300 241 MCGLILVGGLDTVVNFLSFSMEFLAKSPEHRQELIERPERIPAACEELLRRFSLVADGRI 300 301 LTSDYEFAGVQLKKGDQILLPQMLSGLDERXVACPMHVDFSRQKVSHTTFGEGSHLCLGQ 360 301 LTSDYEFAGVQLKKGDQILLPQMLSGLDERXVACPMHVDFSRQKVSHTTFGEGSHLCLGQ 360 CY 361 HLARREIIVTLKEWLTRIPDFSLAPGAQIQHKSGIVSGVQALPLVWDPATTKAV 414 361 HLARREIIVTLKEWLTRIPDFSLAPGAQIQHKSGIVSGVQALPLVWDPATTKAV 414 | RESULT 2 US-10-453-104-2 US-10-453-104-2 US-10-453-104-2 Sequence 2, Application US/10453104 Publication No. US2030207345A1 GENERAL INFORMATION: APPLICANT: California Institute of Technology; APPLICANT: Frances H. Arnold APPLICANT: Frances H. Arnold APPLICANT: Hyun Joo TITLE OF INVENTION: Oxygenase Enzymes and Screening Method FILE REFERENCE: 4058/1882-1033 CURRENT FILING DATE: 2003-6-6-02 PRIOR FILING DATE: 1999-03-6-03 PRIOR FILING DATE: 1999-03-09-13 PRIOR FILING DATE: 1998-01-03 PRIOR FILING DATE: 1998-11-03 | r Windows Version 3.0 | |

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86 LHDQPERRQLRQLMQQGFTRRLITTMEPKIQRVCDDLIDAFVKRGSTEFWTEYAHPFPAK 145
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                214 KPGTDAISIVANGQVNGRPITSDEAKRMCGLLLVGGLDTVVNFLSFSMEFLAXSPEHRQE 273
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                               LISDYEFHGVQLKKGDQILLPQMLSGLDERKNACPMHVDFSRQKVSHTTFGHGSHLCLGQ 360
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                                                                                                                                     333 ACPMHVDFSRQKVSHTTFGHGSHLCLGQHLARREIIVTLKEWLTRIPDFSI 383
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APPLICANT: Burk, Mark J.
APPLICANT: Burk, Mark J.
APPLICANT: Burk, Mark J.
APPLICANT: Hitchman, Tim
APPLICANT: Richardson, Toby
APPLICANT: Richardson, Toby
APPLICANT: Short, Jay M.
TITLE OF INVENTION: P450 ENZYMES, NUCLEIC ACIDS ENCODING
TITLE OF INVENTION: THEM AND METHODS OF MAKING AND USING THEM
FILE REFERENCE: 09010-500001
CURRENT FILING DATE: 2002-08-05
PRIOR APPLICATION NUMBER: US 60/309,497
PRIOR PLING DATE: 2001-08-03
NUMBER OF SEQ ID NOS: 59
SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                              361 HLARREIIVTLKEWLTRIPDFSIAPGAQICHKSGIVSGVQALPLVWDPATTKAV
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27.6%; Pred. No. 3.6e-29;
tive 64; Mismatches 157;
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; Sequence 40, Application US/10214446
; Publication No. US20030180742A1
; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                       ; Sequence 50, Application US/10214446; Publication No. US20030180742A1
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APPLICANT: Burk, Mark J.
APPLICANT: Hitchman, Tim
APPLICANT: Pujol, Catherine
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Best Local Similarity
Matches 97; Conserv
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ORGANISM: Bacterial
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                                                                                                                                                                             301 LTSDYEFHGVOLKKGDQILLPQYLSGLDERKNACPMHVDFSRQKVSHTTFGHSSHLCLGQ 360
                                                                                                                                                                                                         301 LTSDYEFHGVQLKKGDQTLLPQMLSGLDERKNACPMHVDFSRQKVSHTTFGHGSHLCLGQ 360
           TDÇMTRFDGSMTFAEAKEALYDYLIPIIEQRRQKPGTDAISIVANGQVNGRPITSDBAKR 240
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                                                                                                                    241 MCGLLLVGGLDTVVNFLSFSMEFLAKSPEHRQGLIERPELIPAACEELLRRFSLVADGRI
                                                                 MOGILLIVGGLDTVVNFLSFSMEFLAKSPEHRQELIERPERIPAACEBLLRRFSLVADGRI
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GENERAL INFOGRATION:
APPLICANT: California Institute of Technology;
APPLICANT: Frances H. Arnold
APPLICANT: Frances H. Arnold
APPLICANT: Frances H. Arnold
APPLICANT: Hyun Joo
TITLE OF INVENTION: Oxygenase Enzymes and Screening Method
FILE REFERENCE: 4058/1E827-US3
CURRENT APPLICATION NUMBER: US/10/453,104
CURRENT FILING DATE: 2003-06-02
PRIOR PELING DATE: 2000-0-13
PRIOR PLING DATE: 1999-02-09
PRIOR PLING DATE: 1999-02-09
PRIOR APPLICATION NUMBER: US 60/244,403
PRIOR PLING DATE: 1999-11-03
PRIOR PRIING DATE: 1999-11-03
PRIOR PLING DATE: 1999-11-03
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Pred. No. 9.3e-211;
0; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            SOFTWARE: FastSEQ for Windows Version 3.0 SEQ ID NO 13 LENGTH: 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                 US-10-453-104-13; Sequence 13, Application US/10453104; Publication No. US20030207345A1
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Best Local Similarity 99.8
Matches 413; Conservative
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NUMBER OF SEQ ID NOS: 15109
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Matches 104; Conserv
                                                     Local Similarity
ses 110; Conserv
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US-10-314-657-37
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Best Local
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APPLICANT: SHEN, Bec.
APPLICANT: CHENG, Yi-Qiang
APPLICANT: TRNG, Gong-Li
TITLE OF INVENTION: Synthases and Methods of Use
TITLE OF INVENTION: Synthases and Methods of Use
FILE REPERENCE: 05403-0021
CURRENT APPLICATION NUMBER: US/10/314,657
CURRENT PILING DATE: 2002-12-09
PRICK APPLICATION NUMBER: PCT/US02/08937
PRICK APPLICATION NUMBER: US 60/278,935
PRICK APPLICATION NUMBER: US 60/278,935
NUMBER OF SEQ ID NOS: 214
SOFTWARE: Patentir version 3.2
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     252 QIPNEVVILLDRPEGWARLREDPELVPTAVEELM-RFVPLGSGASFPRYATEDVEVGGTL 310
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       196 AKEALYDYLIPIIEQRRQKPGTDAISIVANGQVRGRPIISDEAKRMCGLLLVGGLDTVVN 255
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       256 FLSFSMEFLAKSPEHRQELIBRPERIPAACEELLRRFSLVADG----RILTSDYEFHGVQ 311
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      312 LKKGDQILLPQMLSGLDERKNACPMHVDFSRQKVSHTTFGHGSHLCLGQHLARREIIVTL 371
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                                                                                                                                                                                                                                                                                                                                                                                                31;
                                                                                                                                                                                                                                                                                                                                                         Length 404;
                         APPLICANT: Short, Jay M.
TITLE OF INVENTION: P450 ENCYMES, NUCLEIC ACIDS ENCODING
TITLE OF INVENTION: THEM AND METHODS OF MAKING AND USING THEM
FILE REFERENCE: 09010-500001
CURRENT APPLICATION NUMBER: US/10/214,446
CURRENT APPLICATION NUMBER: US/00/204-07
PRIOR APPLICATION DATE: 2002-08-05
PRIOR FILING DATE: 2001-08-03
NUMBER: OF SEQ ID NOS: 59
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 40
                                                                                                                                                                                                                                                                                                                                                                                                  188; Indels
                                                                                                                                                                                                                                                                                                                                                         DB 14;
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Best Local Similarity 30.1%; Pred. No. 4.6e-29;
Matches 119; Conservative 58; Mismatches 183
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ORGANISM: Streptomyces atroolivaceus
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          Richardson, Toby
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US-10-314-657-37
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      260 SMEPLAKSPEHRQELIERPERIPAACEELLRRFSL---VADGRILISDYEFHGVQLKKGD 316
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  308 GVVAAAVNANRDPRAFDDPDRIDITREXNPHLAFGHGAHYCLGAQLARMELRVAIGGLLE 367
                                                                                                                                                                                                                                                                                 74 RITPLARRSDII-LSLDPPEHTRLRRLLSKAFTARRMGAMQSWLBELFAGLLDGVERIGH 132
                                                                                                                                                                                                                                                                                                                                                                                                              133 PADIVRDLÄQPFTIAVICRLLGVPYEDRGREQHWSEVI-----MSTTAYSKEEAVSADAS 187
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                                                                                                                                                                                                                                        -----AYDFIPTSMDPPEQRQFRALANQVVGMPVVDKLENRIQELACSLIESLRPQGQ 147
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                                                                                                                  38 VQEAWAVLQESNVPDLVWTRCNGGHWIATRGQLIREAYEDYRHFSSECPFIPREAGE-
                                                         36;
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                                                                                                                                                                                                                                                                                                                                                              148 -CNFTEDYAEPFPIRIFMLLAGLPEEDIPHLKYLTDQMTRPDGSMTFAEAKE-
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                                                            Indels
17.1%; Score 372; DB 14; : 28.1%; Pred. No. 1.3e-28; tive 70; Mismatches 176;
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ilarity 29.1%; Pred. No. 4.4e-28;
Conservative 56; Mismatches 181;
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APPLICANT: IKEDA, HARUO
APPLICANT: IKEDA, HARUO
APPLICANT: SHIKAWA, JUN
APPLICANT: SHIKAWA, JUN
APPLICANT: SHIBA, TADAYOSHI
APPLICANT: SHIBA, TADAXOSHI
APPLICANT: HATTORI, MASAHIRA
TITLE OF INVENTION: NOVEL POLYNUCLEOTIDES
FILE REFERENCE: 249-262
CURRENT APPLICATION NUMBER: US/10/156,761
CURRENT APPLICATION NUMBER: UP 2:0:1-2:04089
PRIOR APPLICATION NUMBER: UP 2:0:1-2:04089
PRIOR FILING DATE: 2:0:1-0:8-02
PRIOR APPLICATION NUMBER: UP 2:0:1-2:04089
PRIOR FILING DATE: 2:0:1-0:0:0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Sequence 14997, Application US/10156761; Publication No. US20030119018A1
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; ORGANISM: Streptomyces avermitilis
US-10-156-761-14997
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US20020164742A1
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LENGTH: 416
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                                                                                 : :: | :| | :| :::| | : : : | :| :| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| ::::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::| :::|
                                                                                                                                                                                                                           24: DRAELVSLATELLIAGESTTANMISLGTFTLLRHPEQLAELRASPGLMPAAVEELL-RFL 299
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                                     174 IPHEKYLTDOMIRRDGSMIRAEAKEALYDYLIPIIEQRRQKPGTDAISIVANGQVNGRPI 233
                                                                                                                                                                                  234 TSDEAKRMCGILLVGGLDTVVNFLSFSMEFLAKSPEHRQELIERPERIPAACEFLLRRFS 293
                                                                                                                                                                                                                                                                                                                       294 LVADG--RILTSDYEFHGVQLKKGDQILLPQMLSGLDERKNACPMHVDFSRQKVSHTTFG 351
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TITLE OF INVENTION: DNA encoding methymycin and pikromycin
FILE REFERENCE: 600.438 US.
CURRENT APPLICATION NUMBER: US/09/861,289
CURRENT FILING DATE: 2001-05-18
PRIOR APPLICATION NUMBER: 09/105,537
PRIOR RELING DATE: 1998-06-26
NUMBER OF SEO ID NOS: 43
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US-09-861-289-39
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APPLICANT: Xue, Y.
APPLICANT: Zhao, L.
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Best Local
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RESULT 10 US-09-860-846-39 ; Sequence 39, Application US/09860846

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248 TVNLIANGMYALLSHPDQLAALRADMTLLDGAVEEMLR----YEGPVESATYRFPVEPV 302
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APPLICANT: Xue, Y.
APPLICANT: Zhao, Y.
APPLICANT: Zhao, Y.
TITLE OF INVENTION: DNA encoding methywycin and pikromycin FILE REPERENCE: 600.536US1
CURRENT APPLICATION NUMBER: US/09/988,3843
CURRENT PILING DATE: 2001-11-19
PRIOR FILING DATE: 1999-06-25
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                                                                                                        APPLICANT: Xie, Y.
APPLICANT: Xie, Y.
APPLICANT: Zhao, I.
TITLE OF INVENTION: IDA encoding methymycin and pikromycin
FILE REPERENCE: 600.438US1
CURRENT APPLICATION NUMBER: US/09/860,846
CURRENT FILING DATE: 2001-05-18
PRIOR APPLICATION NUMBER: 09/105,537
PRIOR RILING DATE: 1598-06-26
NUMBER OF SEQ ID NOS: 43
SOFTWARE: FastSEQ for Windows Version 3.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  16.8%; Score 365.5; DB 9;
28.3%; Pred. No. 6.2e-28;
live 62; Mismatches 163;
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PRIOR FILING DATE: 1998-06-26
NUMBER OF SEQ ID NOS: 53
LENGTH: 416
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                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Streptomyces venezuelae US-09-860-846-39
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Best Local Similarity 28.37
Matches 97; Conservative
Patent No. US20020164742A
GENERAL INFORMATION:
APPLICANT: Sherman, D.H.
APPLICANT: Liu, H.
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US-09-988-384B-39
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136 CSLIESL--RPQGQCNFTEDYAEPPIRIFMLLAGLPEEDIPHLKYLTDQMTRPDGSMTF 193
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303 DLDGTVIPAGDTVLVVLADAHRTPERFPDPHRFJIRRDTAGHLAFGHGIHFCIGAPLARL 362
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APPLICANT: BETLACH, Melanie C.
APPLICANT: BETLACH, Mary C.
APPLICANT: BETLACH, Mary C.
APPLICANT: BETLACH, Mary C.
APPLICANT: TANG, Li
TITLE OF INVENTION: RECOMBINANT NARBONCLIDE POLYKETIDE SYNTHASE
FILE REPERBUE: 300622002121
CURRENT APPLICATION NUMBER: US/09/793,708
CURRENT FILING DAIE: 2001-02-22
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28.3%; Pred. No. 6.2e-28;
ive 62; Mismatches 163;
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PRIOR PELING DATE: 2000-09-07
PRIOR APPLICATION NUMBER: US 09/657,440
PRIOR APPLICATION NUMBER: US 09/320,878
PRIOR PELING DATE: 1999-05-27
PRIOR PELING DATE: 1998-08-28
PRIOR FILING DATE: 1998-08-28
PRIOR APPLICATION NUMBER: US 09/073,538
PRIOR FILING DATE: 1998-05-06
PRIOR FILING DATE: 1998-05-06
PRIOR PELING DATE: 1999-05-06-30
PRIOR PLING DATE: 1999-05-06
PRIOR PLING DATE: 1999-05-06
PRIOR PLING DATE: 1999-05-06
PRIOR PLING DATE: 1999-05-06
PRIOR PLING DATE: 1999-05-00
                                                                                                                                                                                                         Sequence 18, Application US/09793708
Publication No. US20030104597A1
GENERAL INFORMATION:
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                                                                                                                                                                                                         QTAMAENSGYLSRIIDSKRGQDGEDLLSALVRTSDEDGSRITSBELLGMAHILLVAGHET 247
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                                                                                            76 ELYRHESSECPFIPREAGEAYDFIPTSMDPPEQRQFRALANQVVGMPVVDKLENRIGELA 135
                                                                                                                   248 TVNLIANGYYALLSHPDQLAALRADMTLLDGÅVEEMLR-----YEGPVESATYRFPVEPV 302
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                                                       Gaps
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            Length 416;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   APPLICANT: Xue, Y.
APPLICANT: Xue, Y.
APPLICANT: Xue, Y.
TITLE OF INVENTION: DA encoding methymycin and pikromycin FILE OFFERNOE: 6.0.4.38US1
CURRENT APPLICATION NUMBER: US/09/836,821
CURRENT FILING DATE: 2001-04-17
PRIOR FILING DATE: 1998-06-26
NUMBER OF SEQ ID NOS: 43
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 33
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16.8%; Score 365.5; DB 10; Length
28.3%; Pred. No. 6.2e-28;
.ive 62; Mismatches 163; Indels
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                                                     Indels
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               DB 10;
                                                     163;
               Score 365.5; DB 10
Pred. No. 6.2e-28;
                                                       62; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 39, Application US/09836821; Publication No. US20030087405A1; GENERAL INFORMATION: APPLICANT: Sherman, D.H.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           ORGANISM: Streptomyces venezuelae US-09-836-821-39
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            16.8%;
28.3%;
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                                                            97; Conservative
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97; Conserva
          Query Match
Best Local Similarity
Matches 97; Conserv
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Xue, Y.
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US-09-836-821-39
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Best Local S:
Matches 97
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ORGANISM:
                                                                                                                                                                                                                                                                 194
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Search completed: April Job time: 35.974 secs
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APPLICANT: ASHLEY, Gary
APPLICANT: BETLACE, Melanie C.
APPLICANT: BETLACE, Mary
APPLICANT: BETLACE, Mary
APPLICANT: BETLACE, Mary
APPLICANT: TANG, Li
TITLE OF INVENTION: COMBINATORIAL POLYKETIDE LIBRARIES PRODUCED USING A MODULAR
TITLE OF INVENTION: PKG GENE CLUGYER AS SCAFFOLD
TITLE OF INVENTION PRESE: US/1C/201,365
CURRENT FILING DATE: 1098-00-07-22
PRIOR APPLICATION NUMBER: US 09/14:,908
PRIOR APPLICATION NUMBER: US 09/14:,908
PRIOR FILING DATE: 1998-05-06
PRIOR FILING DATE: 1998-05-06
NUMBER OF SEQ ID NOS: 32
SOFTWARE: Pate::In Ver. 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      193
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              136 CSLIESL--RPQGQCNFTEDYAEPFPIRIFMLLAGLPEEDIPHLKYLTDQMTRPDGSWTF
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US-10-160-539-18
Sequence 18, Application US/10160539
Sequence 18, Application US/10160539
Publication No. US20030162262A1
GENERAL INFORMATION:
APPLICANT: BETLACH, Melanie C.
APPLICANT: BETLACH, Mary C.
APPLICANT: BETLACH, Mary C.
APPLICANT: BETLACH, Mary C.
APPLICANT: BETLACH, Mary C.
APPLICANT: BETLACH, Mary C.
APPLICANT: BETLACH, MARY C.
APPLICANT: BETLACH, MARY C.
APPLICANT: BETLACH, MARY C.
APPLICANT: BETLACH, MARY C.
APPLICANT: BETLACH, MARY C.
APPLICANT: BETLACH, MARCH C.
APPLICANT APPLICATION NUMBER: US/10/160,539
CURRENT FILLING DATE: 2000-05-07
PRIOR FILLING DATE: 2000-05-07
PRIOR FILLING DATE: 1999-05-27
PRIOR APPLICATION NUMBER: 09/320,878
PRIOR FILLING DATE: 1999-05-27
PRIOR APPLICATION NUMBER: CIP OF 09/141,908
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Sequence 13, Application US/10201365
Publication No. US20030148469A1
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                                                                                                                                                                                                                                                                 Gaps
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28.3%; Pred. No. 6.2e-28;
cive 62; Mismatches 163; Indels
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                                                                                                                                              ORGANISM: Streptomyces venezuelae
PRIOR FILING DATE: 1998-08-28
NUMBER OF SEQ ID NOS: 34
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 18
                                                                                                                                                                                                                                                                   97; Conservative
                                                                                                                                                                                                                                            Similarity
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us-09-246-451a-11.rai

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GenCore version 5.1.6
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protein search, using sw model OM protein April Run on:

6, 2004, 18:49:16 ; Search time 14.9588 Seconds (without alignments) 1428.803 Million cell updates/sec

Title: Perfect score:

US-09-246-451A-11 2180 1 TIETIQSNANLAPLPPHYPE.....IVSGVQALPLVWDPATIKAV 414 Sequence:

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table:

389414 segs, 51625971 residues Searched: Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 200000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

Issued Patents AA:*
| (cgn2 6/ptodata/2/iaa/5A_COMB.pep:*
| (cgn2 6/ptodata/2/iaa/5B_CCMB.pep:*
| (cgn2 6/ptodata/2/iaa/6A_CCMB.pep:*
| (cgn2 6/ptodata/2/iaa/6B_COMB.pep:*
| (cgn2 6/ptodata/2/iaa/6B_COMB.pep:*
| (cgn2 6/ptodata/2/iaa/pcffts COMB.pep:*
| (cgn2 6/ptodata/2/iaa/packffles1.pep:* Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| | Description | Sequence 18, Appl | Sequence 39, Appl | 13, | 18, | 14 | . 52] | M | 12, | 12, | ží. | 0, | Sequence 11, Appl | 듸 | œ | 7, | œ | œ | œ | αj | æ, | 8, Aŗ | 129, | 32437 | Sequence 20, Appl | 'n | 'n | æ |
|-----|---------------|-------------------|-------------------|------|------------------|----------------------|-----------|------|------|--------|-----------|-------------------|-------------------|-------------------|-------------|------------------|-----------------|------------|-----------------|-----------------|-----------------|-----------------|-------------------|----------------------|-------------------|-----------------|--------------|-----------------|
| | ID | US-09-320-878-18 | US-09-105-537-39 | -1 | US-09-657-440-18 | US-09-252-991A-17836 | 5212296-9 | | | -040-1 | 5212296-6 | US-08-765-907A-10 | 863-1 | PCT-US92-10885-11 | -09-335-409 | US-09-413-814-71 | US-09-568-102-8 | 09-567-969 | US-09-568-480-8 | US-09-568-486-8 | US-09-568-472-8 | US-09-567-899-8 | US-09-266-965-129 | US-09-252-991A-32437 | US-09-679-279-20 | US-09-096-982-5 | -08-653-650A | US-09-096-982-8 |
| | DB | n | (ب | ক | 4 | 4 | 9 | ص | 4 | 4 | 9 | 4 | ,-1 | 'n | 'n | 'n | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 7 | 8 | 7 |
| | Length | 416 | 416 | 416 | 416 | 437 | 403 | 409 | 409 | 409 | 406 | 399 | 412 | 412 | 419 | 419 | 419 | 419 | 419 | 419 | 419 | 419 | 395 | 468 | 189 | 422 | 422 | 474 |
| .,, | Cuery | 16.8 | 16.8 | 16.8 | 16.8 | 16.0 | 15.6 | 15.3 | 15.3 | | 15.1 | • | 14.5 | 14.5 | | | | | 12.5 | | 12.5 | 12.5 | 12.0 | 10.7 | 7.7 | 7.3 | • | 7.3 |
| | Score | 365.5 | 365.5 | 3.65 | 365.5 | 349 | 340 | 333 | 333 | 333 | 330 | 324.5 | 316 | 316 | | | 271.5 | 271.5 | 271.5 | 271.5 | 271.5 | 271.5 | 261 | 234 | 168.5 | 160 | 160 | 160 |
| | Result No. | т | 7 | м | 4 | ហ | 9 | 7 | 80 | σ | 10 | TT. | 12 | 13 | 1.4 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 |

| Sequence 8, Appli | ת | Sequence 9, Appli | Sequence 2, Appli | Sequence 2, Appli | Sequence 5, Appli | Sequence 16, Appl | Sequence 7, Appli | Sequence 7, Appli | Æ | Sequence 22, Appl | Sequence 2, Appli | Sequence 4, Appli | Sequence 4, Appli | Sequence 2, Appli | Sequence 24, Appl | Sequence 6, Appli | Sequence 3, Appli |
|-------------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| US-08-653-650A-8 | US-09-096-9B2-9 | US-08-653-650A-9 | US-08-396-218-2 | US-08-760-116-2 | US-08-194-981E-5 | US-09-215-694-16 | US-09-320-878-7 | US-09-141-908-7 | US-09-657-440-7 | US-09-105-537-22 | US-09-583-447A-2 | US-09-105-537-4 | US-09-583-447A-4 | US-09-144-367-2 | US-09-126-420A-24 | US-08-948-564-6 | US-08-201-118-3 |
| (3) | ~ | N | Н | Н | ~ | 4 | m | 4 | 4 | m | 4 | m | 4 | 4 | 4 | m | Н |
| 474 | 443 | 443 | 422 | 422 | 512 | 516 | 382 | 382 | 382 | 402 | 503 | 3782 | 504 | 503 | 524 | 513 | 490 |
| 7.3 | 7,2 | 7,2 | ۲- ان | 7.1 | 6.0 | 5.8 | 5.7 | 5. | 5,3 | io. | 5.7 | 5.7 | 5.6 | 5.6 | 5.6 | 5.4 | 5.2 |
| 160 | 157 | 157 | 155 | 155 | 130 | 127 | 123.5 | 123.5 | 123.5 | 123.5 | 123.5 | 123.5 | 123 | 122 | 121.5 | 118 | 113.5 |
| 83 | 53 | 30 | 걾 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |

ALIGNMENTS

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188 QTAMAEMSGYLSKIIDSKRGQDGEDILSALVKTSDEDGSRLTSEELLGMAFILLVAGHET 247
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                                                                                       APPLICANT: ASHLEY, Gary
APPLICANT: BETLACH, Melanie C.
APPLICANT: BETLACH, Mary C.
APPLICANT: MCDANIEL, Robert
APPLICANT: TANG, Li
TITLE OF INVENTION: RECOMBINANT NARBONOLIDE POLYKETIDE SYNTHASE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 416;
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                                                                                                                                                                                                                                                       FILE PERERROR: 300622002120
CURRENT FILING DATE: 1999-05-27
CURRENT FILING DATE: 1999-05-27
EARLIER APPLICATION NUMBER: US/09/320,878A
EARLIER APPLICATION NUMBER: CIP OF 09/141,908
EARLIER FILING DATE: 1998-08-28
EARLIER FILING DATE: 1998-08-08
EARLIER FILING DATE: 1998-09-06
EARLIER FILING DATE: 1998-09-06
EARLIER APPLICATION NUMBER: CIP OF 08/846,247
EARLIER APPLICATION NUMBER: G0/10,139
EARLIER FILING DATE: 1999-03-08
EARLIER FILING DATE: 1999-03-08
EARLIER FILING DATE: 1999-03-08
EARLIER FILING DATE: 1998-03-22
EARLIER FILING DATE: 1998-09-22
EARLIER FILING DATE: 1998-05-28
EARLIER FILING DATE: 1998-05-28
EARLIER FILING DATE: 1998-05-28
EARLIER FILING DATE: 1998-05-28
EARLIER FILING DATE: 1998-05-28
EARLIER FILING DATE: 1998-05-28
                ; Sequence 18, Application US/09320878A; Patent No. 6117659; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ORGANISM: Streptomyces venezuelae
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Matches 97; Conserv
US-09-320-878-18
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                                         308 --HGVQLKKGDQILLPQMLSGLDBRKWACPMHVDFSRQKVSHTTFGHGSHLCLGQHLARR 365
                                                                                                                                                                                                       303 DIDGTVIPAGDTVLVVLADAHRTPERFFDÉHAFDIRKDTAGHLAFGHGIHFCIGAPLARL 362
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WWFLSFSMEFLAKSPEHROELIERPERIPAACEELLRRFSLVADGRILTSDYEF-
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APPLICANT: Sherman, D.H.
APPLICANT: Liu, H.
APPLICANT: Xae, Y.
APPLICANT: Xae, Y.
APPLICANT: Xae, Y.
APPLICANT: APPLICANT: Condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition of the condition o
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                                                                                                                                                                                                                                                                                      EIIVTLKEWLTRIPDFS--IAPGAQIQHKSGIVSGVQALPLVW 406
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                                         248 TVNLIANGMYALLSHPDQLAALRADMTJLDGAVEBMLR
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              TYPE: PRT;
CORGANISM: Streptomyces venezuelae
US-09-105-537-39
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Best Local Similarity 28.3
Matches 97; Conservative
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US-09-105-537-39
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TITLE OF INVENTION: Combinatorial Polyketide Libraries Produced Using a TITLE OF INVENTION: Modular PKS Gene Cluster as Scaffold FILE STERRENCE: 300622002100
CURRENT APPLICATION NUMBER: US/09/141, 908
CURRENT FILING DATE: 1998-08-28
EARLIER APPLICATION NUMBER: CIP OF 09/073,538
EARLIER APPLICATION NUMBER: CIP OF 08/346,247
EARLIER FILING DATE: 1998-05-06
EARLIER FILING DATE: 1998-05-06
EARLIER FILING DATE: 1999-03-05
EARLIER FILING DATE: 1999-03-05
EARLIER FILING DATE: 1998-03-05
EARLIER FILING DATE: 1998-05-28
NUMBER OF SEQ ID NOS: 31
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APPLICANT: BETLACH, Melanie C.
APPLICANT: BETLACH, Mary C.
APPLICANT: BETLACH, Mary C.
APPLICANT: BETLACH, Mary C.
APPLICANT: TANG, Li
TILLE OF INVENTION: RECOMBINANT NARBONOLIDE POLYKETIDE SYNTHASE
FILE REFERENCE: 300622012120
CURRENT APPLICATION NUMBER: US/09/657,440
PRIOR APPLICATION NUMBER: US/09/657,440
PRIOR FILING DATE: 1399-65-27
PRIOR FILING DATE: 1399-66-27
PRIOR FILING DATE: 1399-06-27
PRIOR FILING DATE: 1398-06-28
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     253 VWNFLSFSMEFLAKSPEHRQELIERPERIPAACEELLRRFSLVADGRILISDYEF-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          21;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 416;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               366 ELLVILKEWLTRIPDFS--IAPGAQIQHKSGIVSGVQALPLVW
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Query Match 16.8%; Score 365.5; DB 4; Best Local Similarity 28.3%; Pred. No. 2.1e-29; Matches 97; Conservative 62; Mismatches 163;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 18, Application US/09657440; Patent No. 6509455; GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          TYPE: PRT; CRGANISM: Streptomyces venezuelae US-09-141-908-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 18
LENGTH: 416
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                                                                                                                                                                                                                                                                                                                                                                                                                                      SEQ ID NO 13
LENGTH: 416
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TYPE: PRT

Sequence 13, Application US/09141908; Patent No. 6503741; GENERAL INFORMATION: APPLICANT: ASHLEY, Gary APPLICANT: BETLACE, Melanie C.; APPLICANT: BETLACE, Melanie C.; APPLICANT: BETLACE, Melanie C.; APPLICANT: MCDANIEL, Robert APPLICANT: TRNG, Li

US-09-141-908-13

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228 DIQIAT-----MGRILLVAGHETTANMTALSTIVILENPDQLARLRAEPALVKGAVEELL 282
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                                                                                             340 FSROKVSHTTFGHGSHLCLGQHLARREIIVTLKEWLTRIPDFSIA-PGAQIQHKSGIVSG 398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RRFSLVADG--RILISDYEFHGVQLKKGDQILLPQMLSGLDERKNACP--MHVDFSRQKV 345
        PAACEELLRRFSLVADG--RILTSDYEFHGVQLKKGDQILLPQMLSGLDERKNACPMHVD 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              116 NOVVGMPVVDKLENRIQELACSLIESLRP-QGQCNFTEDYAEPFPIRIFMLLAGLPEEDI
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                                     289 PNAMEELVRHDSPVRASMLRFTVEDVELDGVTIPAGEYILVSNLTANHDAERFDDPDRLD
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  52 WIVTRHODVRAVIGDPR-FSADAHRIGFPFLTAGGREIIGTNPTFLRWDDPEHARIERML
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                                                                                                                     Length 403;
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, Pred. No. 9.3e-27;
63; Mismatches 165; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: EXPRESSION OF HERBICIDE METABOLIZING
                                                                                                                                                                                                                                                                                                                                                  A.; LETO,
                                                                                                                                                                                                                                                                                                                                                    APPLICANT: DEAN, CAROLINE; HARDER, PATRICIA A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICATION NUMBER: US/07/569,781
FILING DATE: 23-A002-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 464,499
FILING DATE: 12-7AM-1990
APPLICATION NUMBER: 405,605
FILING DATE: 11-SEP-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       RESULT 7
10S-08-185-028-12
5 Sequence 12, Application US/09385028
7 Parent No. 6232106
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28.9%;
                                                                                                                                                                               399 VOALPLVWDPAT 410
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Best Local Similarity 28.9
Matches 105; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                          NUMBER OF SEQUENCES: 19
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       GENERAL INFORMATION:
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APPLICANT: MAIC J. Rubenfield et al.
TITLE OF INTERTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
TITLE OF INVENTION: ASEUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR APPLICATION NUMBER: US 60/094,190
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 17836
                                                                                                                                                                                                                                                                                                                                                                                                307
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         229 GLYQAADESGQLSEAELVSMAHLLMMSGFETTKYMIGNALVTLLVNPEQLALLRAQPELL 288
                                                                                                                                                                                                                                                                                                                                                      247
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     --HGVQLKKGDQILLPQMLSGLDERKNACPMHVDFSRQKVSHTTFGHGSHLCLGQHLARR 365
                                                                                                                                            76 EDYRHFSSECPFIEREAGEAYDFIPTSMDPPEQRQFRALANGVVGMPVVDKLENRIQELA 135
                                                                                                                                                                                                                                                      DLDĞTVIPAĞDTVLVVLADAHRTPERFPDPHRFDIRRDTAGHLAFGHĞIHFCIGAPLARL 362
                                                                                                                                                                               KCWR--NSTTPLTERERALINHNMLES--DPPRHTRLRKLVAREFIMRRVELLRPRVOBIV 127
                                                                                                                                                                                                                            CSLIES: -- RPOGQCNFTEDYAEPFPIRIFMLLAGLPEEDIPHLKYLTDOMTRPDGSMTF 193
                                                                                                                                                                                                                                                                                                              AEAKEALYDYLIPIIBQRRQKPGTDAIS-IVANGQVNGRPITSDEAKRMCGLLLVGGLDT 252
                                                                                                                                                                                                                                                                                                                                                                                                                                           TVNI IANGMYALLSHPDQLAALRADMTLLDGAVEEMLR-----YEGPVESATYRFPVEPV 302
                                                                                                                                                                                                                                                                                                                                         165 BLAGIPEEDIPHLKYLID---QMTRPDGSMTFAERKEALYDYLIPIIEQRRQKPGTDAIS
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                                                                                                                                                                                                                                                                                                                                                                                                   VYMFLSFSYEFLAKSPEHROELIERPERIPAACEELLRRFSLVADGRILTSDYEF----
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                                                            Length 416;
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                                                            DB 4;
                                                                                                    62, Mismatches 163;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Score 349; DB 4;
Pred. No. 1.2e-27;
                                                         16.8%; Score 365.5; DB 4 28.3%; Pred. No. 2.1e-29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             63 WIATRGOLIREAYEDYRHFSSECPFIPREA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 17836, Application US/09252991A
Patent No. 6551795
ORGANISM: Streptomyces venezuelae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ORGANISM: Pseudomonas aeruginosa
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25.5%;
                                                                                                    97; Conservative
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Best Local Similarity
Thes 95; Conserve
                                                                                Local Similarity
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      ; OKGANISM: SCI
US-09-657-440-18
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Matches
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352 HGWHQCLGQWLARVELEEILAAVLRWM---PGARLAVPFEELDFRHEVSSYGLGALPVTW 408
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CIASIBLECATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/790,462
FILING DATE: 29-JAN-1997
ATTORNEY/AGENT INFORMATION:
NAME: D. DOUGLAS PRICE
REGISTRATION NUMBER: 24,514
REFERENCE/OCCET NUMBER: 1418/P5745
TELEPHONE: (202 39305350
TELEPHONE: (202 39305350
TELEFAX: (202) 39305350
TELEFAX: RAS93 IDEA UR
TELEX: RCA 248593 IDEA UR
TELEX: RCA 248593 IDEA UR
SEQUENCE CHARACTERISTICS:
FENCHATION POR SEQ ID NO: 12:
FENCHATION OCIDS
SEQUENCE CHARACTERISTICS:
FENCHATION OCIDS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PATENTIN Release #1.0,
SOFTWARE: APPLICATION DATA:
APPLICATION NUMBER: US/09/726,614
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                                                                                                                                                                         Sequence 12, Application US/09726614
Patent No. 6514735
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         IBM PC compatible
                                                                                                                                                                                                                                       APPLICANT: Susan E. Jensen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Floppy disk
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            409 amino acids
amino acid
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Best Local Similarity 29.09
Matches 122; Conservative
                                                                                                                                                                                                                                                                                                                                                                               CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             ZIP: 20004
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: linear MOLECULE TYPE: protein
                                                                                                                                                                                                                                                                                                                                                                                                                                     CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                              D.C.
: U.S.A.
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US-09-726-614-12
                                                                                                                                        RESULT 8
US-09-726-614-12
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           178 X----YLTDQMTRPDGSMTFAEAKEALYDYLIPIIEQRRQKPGTDAISIVANGQVNGRPI 233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     234 TSDEAKRMCGLLLVGGLDTVVNFLSFSMEFLAKSFEHRQELIERPERIPAACEELLRRFS 293
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                                         APPLICANT: Ashish S. Paradkar
IITLE OF INVENTION: DNA Sequence Encoding Enzymes of Clavulanic
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                                                                                                                                                        3: JACOBSON, PRICE, HOLMAN & STERN, PPLC
The Jenifer Buliding, 400 Seventh Street, N.W.
                                                                                                                                                                                                                                                                            COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: ISM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30 (EEC)
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29.0%; Pred. No. 5.1e-26;
tive 60; Mismatches 185;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                NAME: D. Douglas Price
REGISTRATION NUMBER: 24,514
REGISTRATION NUMBER: 1418/P57452US2
TELECOMMUNICATION INFORMATION:
TELEPHONE: (202 638-666
TELEPHONE: (202) 39105300
                                                                                Patent No. 6232106
TITLE OF INVENTION: Acid Biosynthesis
                                                                                                                                                                                                                                                                                                                                                                                                                                                            PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/790,462
FILING DATE: 29-JAN-1997
ATTORNEY/AGENT INFORMATION:
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                          Kwamena A Aidoo
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MOLECULE TYPE: protein
                                                                                                                     NUMBER OF SEQUENCES: 25
CCRRESPONDENCE ADDRESS:
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Best Local Similarity
Matches 122; Conserv
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APPLICANT:
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75 YEDYRHFS-SECPFIP-----REAGEAYDFIPTSMDPPEQRQPRA-----LANQV 118
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APPLICANT: Kwama A Aidos
APPLICANT: Ashish S. Paradkar
TITLE OF INVENTION: DNA Sequence Encoding Enzymes of Clavulanic
Patent No. 6514735
TITLE OF INVENTION: Acid Biosynthesis
NUMBER OF SEQUENCES: 25
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15.3%; Score 333; DB 4; Length 409; 29.0%; Pred. No. 5.1e-26; Live 60; Mismatches 185; Indels
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STREET: The Jenifer Buliding, 400 Seventh Street, N.W.
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APPLICANT: BLANC, Veronique
APPLICANT: THIBANT, Denis
APPLICANT: BAMAS-JACQUES, Nathalie
APPLICANT: BLANCHE, Francis
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BARRIERE, Jean-Claude
DEBUSSCHE, Laurent
FAMECHON, Alain
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APPLICANT:
             407
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                                                                                                                              Patent No.
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                                                                                             294 LVADG--AILISDYBFHGVQLKKGDQILLPQMLSGLDBRKNACPMHVDFSRQKVSHTTFG 351
                                                                                                                             292 IVONGLARAAVEDVOLDDVLIRAGEGVVLSLSAGNRDETVFPDPDRVDVDRDARRILAFG 351
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EDRSAVLIDRGYTPE---QVAKARDELDGYLRELVEERIENPGTDLISRLVIDQVRPGHL 231
                               TSDEAKRMCGLLLVGGLDTVVNFLSFSMEFLAKSPEGRQELIERPERIPAACEELLRRFS 293
                                                              232 RVEEMVPNCRILLVAGHGTTTSQASISILSLITDPBLAGRITEDPALLPKAVEELLRFHS 291
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                                                                                                                                                                                                                                                                                                                                                                                                            APPLICANT: Addoo, Kwamena A
APPLICANT: Paradkar, Ashish S
APPLICANT: Paradkar, Ashish S
TITLE OF INVENTION: DNA SEQUENCE ENCODING ENZYMES OF CLAVULANIC ACID
TITLE OF INVENTION: BIOSYNTHESIS
FILE REFERENCE: 09/385,040
CURRENT APPLICATION NUMBER: US/09/385,040
CURRENT FILING DATE: 1999-08-30
PRIOR APPLICATION NUMBER: US 08/790,462
PRIOR FILING DATE: 1997-01-29
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Length 409;
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; Pred. No. 5.1e-26;
60; Mismatches 185; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ; TYPE: PRT; CRGANISM: Streptomyces clavuligerus US-09-385-040-12
                                                                                                                                                                                                                                                                                                                                             Sequence 12, Application US/09385040 Patent No. 6589775
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29.0%;
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SEQ ID NO 12
LENGTH: 409
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APPLICANT: Jensen, Susan E
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Best Local Simil
Matches 122; (
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               312 AGEGVIVVNSIANRDGTVYEDPDALDIHRSARHHLAFGFGVHOCLGGNLARLELEVILNA 371
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KENNETH
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26.3%; Pred. No. 1e-25;
.ive 74; Mismatches 193; Indels
                                                                                                                                        TEPPERMAN, JAMES M. TITLE OF INVENTION: EXPRESSION OF HERBICIDE METABOLIZING
APPLICANT: DEAN, CAROLINE; HARDER, PATRICIA A.; LETO, ;J.; O'KEEFE, DANIEL P.; OMER, CHARLES A.; ROMESSER, JAMES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           406
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                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQUENCES: 19
CURRENT APPLICATION DATA:
APPLICATION NUMBER: 0S/07/569,781
FILING DATE: 23-AUG-1990
PRIOR APPLICATION NUMBER: 464,499
FILING DATE: 12-JAN-1990
APPLICATION NUMBER: 464,499
FILING DATE: 12-JAN-1990
APPLICATION NUMBER: 405,605
FILING DATE: 11-SEP-1989
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105 VDDPEHNTQRRMIIPTFSVKRIGALRPRIQETVDRLLDAMERQGPPAELVSAFALPVPSM 164
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             282 PAACEELLRRFSLVADG--RILTSDYEFHGVQLKKGDQILLPQMLSGLDERKVACPMHVD 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        340 FSRQKVSHTTFGHGSHLCLGQHLARREIIVTLKEWLTRIPDFSIA-PGAQIQHKSG-IVS 397
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            56; Mismatches 163;
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EXPRESSION OF P450SOY
AND FERREDOXIN-SOY IN
             APPLICATION NUMBER: US/08/102,863
FILING DATE:
CLASSIFICATION: 435
CLASSIFICATION: 435
FRIOR APPLICATION NUMBER: US/07/807,001
FILING DATE:
APPLICATION NUMBER: US/07/807,001
FILING DATE:
ATORNEY AGENT INFORMATION:
NAME: GALLEGOS, R. THOMAS
REGISTATION NUMBER: 32,692
REFERENCE/DOCKET NUMBER: CR-9000
TELEFOND: 302-892-7342
TELEFHONE: 302-892-7342
TELEFHONE: 302-892-7342
INFORMATION FROM INFORMATION:
SEQUENCE CHARACTERISTICS:
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ADDRESSEE: AND COMPANY
  DATA:
R: US/08/102,863
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GENERAL INFORMATION:
APPLICANT: SARIASLANI, SIMA
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TITLE OF INVENTION: EXP
TITLE OF INVENTION: AND
TITLE OF INVENTION: STR
KUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                            MOLECULE TYPE: protein
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MEDIUM TYPE: 1.0 MB
MEDIUM TYPE: 1.0 MB
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      CURRENT APPLICATION
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Best Local Simi
Matches 84;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     US-08-102-863-11
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                                                                                                                                                                                                                                                                                                                                                          LENGTH:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  122 PVVDKLENRIQELACSLIESLRPQGQC-NFTEDYAEPFPIRIEMLLAGLPERDIPHLKYL 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    225 NGQVNGRPITSDEAKRMCGLLLVGGLDTVVNFLSFSMEFLAKSPEHRQELIERPER--IP 282
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               214 AARVEGERLIDEQIVEFGALLLMAGHVSTSMLLGNTVLCLKDHP--RAEAAARADRSLIP 271
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      283 AACEELLR-RFSLVADGRILTSDYEFHGVQLKKGDQILLPQMLS-GLDERKNACPMHYDF 340
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          -----PDGSWTFAEAKEALYDYLIPIIEQRRQKPGTDAISIVA 224
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                272 ALIBEVLRIRPPITVMARVTIKDTVLAGTTIPAG-RMVVPSILSANHDEQVFTDPDHLDL 330
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             341 SROKVSHTTFGHGSHLCLGQHLARREIIVTLKEWLTRIPDFSIAPGAQIQ-HKSGIVSGV 399
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                     36 AFHVFRHADVLTVASDÞGVYSSQLSRLRPGSQALSEGTLSVIDÞÞMHRTLRRLVSGAFTP 95
APPLICANT: PARIS, Jean-Marc
APPLICANT: DUTRUC-ROSSET, Gilles
TITLE OF INVENTION: Streptogramins And Method For Preparing Same By
TITLE OF INVENTION: Mutasynthesis
FILE REFERENCE: Streptogramin genes
CURRENT APPLICATION NUMBER: US/08/765,907A
CURRENT FILING DATE: 1997-03-20
SOFTWARE: Patentin Ver. 2.0
                                                                                                                                                                                                                                                                                                                                     Length 399;
                                                                                                                                                                                                                                                                                                                                                                               Indels
                                                                                                                                                                                                                                                                                                                                   14.9%; Score 324.5; DB 4; 29.0%; Pred. No. 3.8e-25; tive 59; Mismatches 159;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sequence 11, Application US/08102863
Patent No. 5466590
GENERAL INFORMATION:
TITLE OF INVENTION: EXPRESSION OF P450SOY
TITLE OF INVENTION: EXPRESSION OF P450SOY
TITLE OF INVENTION: STREFTOMYCES
NUMBER OF SEQUENCES: 12
                                                                                                                                                                                                                                             TYPE: PRT ORGANISM: Streptomyces pristinaespiralis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         CORRESPONDENCE ADDRESS:
ADDRESSEE: B. I. DU PONT DE NEMOURS
ADDRESSEE: AND COMPANY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IRM PC Compatible
OPPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentln Release #1.0,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STREET: 1007 MARKET STREET
CITY: WILMINGTON
STATE: DELAWARE
COUNTRY: USA
                                                                                                                                                                                                                                                                                                                                                                                    Conservative
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Matches 106; Conserv
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                                                                                                                                                                                                   SEQ ID NO 10
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110 CPRALANQVVGMPVVDKLENRIQELACSLIESLRPQGQCNFTEDYAEPFPIRIFMLLAGL 169
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   333 ALR--DGTVFSRPDVFDVRKDTGASLAYGRGPHVCPGVSLARLEREIAVGTIFRRFPEMK 390
                                                                                                                                                                                                                                    -----LIRBAYEDYRHFSSECPFIPREAGEAYDFIPTSMDPPEQR 109
                                                                                                                                                                                                                                                                                                                                                                                                                                                                          165 PAE-----CDEKFRFGSAT----ARALGVGLVPQVDEETKTLVASVTEGLALLHDV 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  SPEHRQELIERPERIPAACEELLRRFSLVADG--RILTSDYEFHGVQLKKGDQI--LLPQ 322
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APPLICANT: Moller, Joachim
APPLICANT: Meller, Joachim
APPLICANT: Reichembach, Hans
TITLE OF INVENTION: DNA Sequences for enzymatic synthesis of polyketide or
TITLE OF INVENTION: heteropolyketide compounds
FILE REFERENCE: PCT/US 99/23535
CURRENT APPLICATION NUMBER: US/09/413,814
CURRENT FILING DATE: 1999-10-07
EARLIER FILING DATE: 1999-10-07
EARLIER FILING DATE: 1999-10-07
EARLIER FILING DATE: 1999-10-07
EARLIER FILING DATE: 1999-10-07
SOFTWARE: Patentin Ver. 2.1
                                                                                                                                        6 ÇSNANLAPLPPHVPEHLVFLFDMYNPSNLSAGVQE----AWAVLQESNVPDLVWTRCNSG
                                                                                                                                                                                                                                                                                                                                                                            105 RWRKLVNPSFTSRAIDLLRAEIQRTVDQLLDARSGQEEFDVVRDYAEGIPMRAISALLKV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       208 IEORROKP-GIDAISIVANGGVNGRPITSDEAKRMCGLLLVGGLDTVVNFLSFSMEFLAK
                                                                                                                                                                                  3 ÇEQÂNQSETKP-----AFCFKPFAP-----GYAEDPFPAIERLREA-TPIFYWD--EGR
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                                            DB 3; Length 419;
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APPLICANT: Bristol-Myers Squibb, Co.
APPLICANT: Beyer, Stefan
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                         Indels
                                       12.5%; Score 271.5; DB 3;
23.8%; Pred. No. 1.4e-19;
live 67; Mismatches 179;
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                                                                                                                                                                                                                                                                                                                                                                                                                           170 PEEDIPHLKYLTDOMTRPDGSMTFAEAKZALYDYLIP-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 71, Application US/09413814
Patent No. 6225064
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; LENGTH: 419
; TYPE: PRT
; ORGANISM: Sorangium cellulosum
US-09-413-814-71
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APPLICANT: Brandt, Petra
. APPLICANT: Cino, Paul M
APPLICANT: Dougherty, Brian A
APPLICANT: Goldberg, Steven L
APPLICANT: Hofle, Gerhard
                                                                                         Conservative
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3est Local Similarity 23.8
Matches 100; Conservative
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                                                                Best Local Similarity
Matches 100; Conserv
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US-09-335-409-8
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                                            Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            105 WDDPEHNTQRRMLIPTFSVKRIGALRPRIQETVDRILDAMBRQGPPAELVSAFALPVPSM 164
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              282 PAACEELLRRFSLVADG--RILTSDYEFHGVQLKKGDQILLPQMLSGLDERKOACPMHVD 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          285 AVVVEELL-RFLSIAEGLQRLATEDMEVDGATIRKGEGVVFSTSLINRDADVFPRAETLD 343
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     344 WDRPARHHIAFGFGVHQCLGQNLARAELDIAMRTLFERLPGLRLAVPAHELRHXKGDTIQ 403
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     162 JEWLLAGLPEEDIPHLKYLTDQMTRPDGSMTPAEAKEALYDYLIPIIEQRRQKPGTDAIS 221
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              222 IVANGOVNGRPITSDEAKRMCGLLLVGGLDTVVNFLSFSMEFLAKSPEHRQELIERPERI 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        340 FSROKVSHITFGHGSHLCLGQHLARREIIVTLKEWLTRIPDFSIA-PGAQIQHKSG-IVS 397
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 165 VICALLGVEYADHAFFEERSQRLLRGPGADDVNRARDELEEYLGALIDRKRAEPGDGLLD
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Patent No. 612129
GENERAL INFORMATION:
APPLICANT: Schupp, Thomas
APPLICANT: Ligon, James
APPLICANT: Ligon, James
APPLICANT: Listvan
APPLICANT: Zirkle, Ross
APPLICANT: Cyr, Devon
APPLICANT: Goerlach, Joern
TITLE OF INVENTION: GENES FOR THE BIOSYNTHESIS OF EPOTHILONES
FILE REFERENCE: 4-30582A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             14.5%; Score 316; DB 5; Length 412; 27.2%; Pred. No. 3.1e-24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            56; Mismatches 163;
              OPERATING SYSTEM: Macintosh System, 6.0 SOFTWARE: Microsoft Word, 4.0 CURRENT APPLICATION DATA:
                                                                                                                                                  ATTORNEY/AGENT INFORMATION:
NAME: GALLEGOS, R. THOMAS
REGISTRATION NUMBER: 32,692
REFERENCE/DOCKET NUMBER: CR-9000-A
TELECOMMUNICATION INFORMATION:
TELEPHONE: 302-892-7342
TELEPHONE: 302-892-7949
INFORMATION FOR SEQ ID NO: 11: SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            CURRENT APPLICATION NUMBER: US/09/335,409
CURRENT FILING DATE: 1999-06-17
NUMBER OF SEQ ID NOS: 30
                                                                                    APPLICATION NUMBER: PCT/US92/10885
FILING DATE: 19921216
CLASSIFICATION:
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                                                                                                                                                                                                                                                                                                                                                                         LENGTH: 412 amino acids
TYPE: AMINO ACID
STRANDEDNESS: unknown
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Macintosh
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                                                                                                                                                                                                                                                                                                                                                                                                                                               unknown
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Best Local Similarity
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       84;
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LENGTH: 419
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Gaps

| QSNANLAPLPPHVPEHLVFDFDMYNPSNLSAGVQEAWAVLQESNVPELVWTRCNGG 61 QSQANQSETKPAFDFKPFAPGYAEDPFPAIERLREA-TFIFYWDEGR 48 | HWIATRGQLIREAYEDYRHFSSECPFIPREAGEAYDFIPTSMDPPEQR 109 | QFRALANQVVGMPVVDKLENRIQELACSLIESLRPQGQCNFTEDYAEPFFIRFMLLAGL 169 : | PEEDIPHLKYLTDQMTRPDGSMTFAEAKRALYDYLIP | IEGERQKP-GTDAISIVANGQWNGRPITSDEAKRMCGLLLVGGLDTVWRFLSFSMEFLAK 266 ::: : : : : : : : : : : : : | SPEHRQELLERPERIPAACEELLRRRSLVADGRILTSDYBFHGVQLKKGDQILLPQ 322 : | MISGIDERRAKACPMHVDFSRQKVSHTTFGHGSHLCLGQHLARREIIVTLKEMLTRIPDFS 382 | I 383 : 391 |
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| n e | 62 | 110 | 170 | 208 | 267 | 323 | 383 |
| & 43 | à a | λ _ο d | දුරු අධ | oy B | දු පු | AG Pg | cy. |

Search completed: April 6, 2004, 18:55:58 Job time : 15.9588 secs

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April 6, 2004, 18:53:57; Search time 34.974 Seconds (without alignments) 3108.883 Million cell updates/sec
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2179
1 TTETIQSNANLAPLPPHVPE.....IVSGYQALPLVWDPATTKAV 414
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| cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
2: /cgn2_6/ptodata/1/pubpaa/PCT NEW PUB.pep:*
3: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*
4: /cgn2_6/ptodata/1/pubpaa/US06_PUBCOMB.pep:*
5: /cgn2_6/ptodata/1/pubpaa/US07_NEW PUB.pep:*
6: /cgn2_6/ptodata/1/pubpaa/US07_NEW PUB.pep:*
7: /cgn2_6/ptodata/1/pubpaa/US07_NEW PUB.pep:*
8: /cgn2_6/ptodata/1/pubpaa/US08_NEW PUB.pep:*
9: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
9: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
11: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
12: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
13: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
14: /cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
15: /cgn2_6/ptodata/1/pubpaa/US106_PUBCOMB.pep:*
15: /cgn2_6/ptodata/1/pubpaa/US106_PUBCOMB.pep:*
16: /cgn2_6/ptodata/1/pubpaa/US106_PUBCOMB.pep:*
16: /cgn2_6/ptodata/1/pubpaa/US106_PUBCOMB.pep:*
16: /cgn2_6/ptodata/1/pubpaa/US106_PUBCOMB.pep:*
16: /cgn2_6/ptodata/1/pubpaa/US106_PUBCOMB.pep:*
16: /cgn2_6/ptodata/1/pubpaa/US106_PUBCOMB.pep:*
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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Maximum Match 100%
Listing first 45 summaries
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 2000000000
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Perfect score:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Searched:
                                                                                                                                                                                                                                                                                                                                                      Sequence:
                                                                                                                                                                           Run on:
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

| | | 4 | Describulon | Sequence 12, Appl | Sequence 11, Appl | Sequence 2, Appli | Sequence 13, Appl | Sequence 50, Appl | | Sequence 37, Appl | Sequence 14997, A | Sequence 39, Appl | Sequence 39, Appl | Sequence 39, Appl | Seguence 39, Appl | | Sequence 13, Appl | Seguence 18, Appl |
|------------|-----|--------|-------------|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|-------------------|---------------------|-------------------|-------------------|-------------------|-------------------|------------------|-------------------|-------------------|
| COLLINGTER | | í. | T | US-10-453-134-12 | US-10-453-104-11 | US-10-453-104-2 | US-10-453-104-13 | US-10-214-446-50 | US-10-214-446-40 | US-10-314-657-37 | US-10-156-761-14997 | US-09-861-289-39 | US-09-860-846-39 | US-09-988-384B-39 | US-09-836-821-39 | US-09-793-708-18 | US-:10-201-365-13 | US-10-160-539-18 |
| | | 0 | 9 | 15 | 15 | 15 | 15 | 함 라 | 14 | 14 | 4 | σ | Q) | 10 | 10 | 70 | 14 | 14 |
| | | Query | ners) cri | 414 | 414 | 414 | 414 | 404 | 404 | 399 | 416 | 416 | 416 | 416 | 416 | 416 | 416 | 416 |
| | οķο | Query | FIGURE: | 100.0 | 7.66 | 99.5 | 99.2 | 17.6 | 17.6 | 17.3 | 17.1 | 17.0 | 17.0 | 17.0 | 17.0 | 17.0 | 17.0 | 17.0 |
| | | 0000 | י מרכזים | 2179 | 2173 | 2169 | 2162 | 383.5 | 382.5 | 378 | 373 | 371.5 | 371.5 | 371.5 | 371.5 | 371.5 | 371.5 | 371.5 |
| | | Result | | Н | 7 | Ŕ | 4 | Ŋ | 9 | 7 | හ | Q | 10 | 11 | 12 | 13 | 14 | 15 |

| 39 Sequence 39, P 8376 Sequence 8376, | | Sequence | Seguence | 14 Sequence | 073 Sequence | 9 Sequence | Sequence | | Sequence | 776 Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | Seguence | Sequence | Sequence | Sequence | Sequence | Sequence | Sequence | 14 Sequence 14, A | Section 66. |
|--|------|----------------|----------------|----------------|----------------|----------------|----------------|------------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|----------------|-------------------|-------------|
| US-10-271-889- US-10-156-761- | 0-15 | US-10-214-446- | US-10-214-446- | US-10-156-761- | US-10-156-761- | US-10-389-647- | US-10-214-446- | US-10-458-201-12 | US-10-214-446- | US-10-156-761- | US-10-214-446- | US-10-214-446- | US-10-214-446- | US-10-201-213-6 | US-10-156-761- | US-10-156-761- | US-10-214-446- | US-10-156-761- | US-10-214-446- | US-10-205-032- | US-10-156-761- | US-10-145-415- | US-10-145-415- | US-10-314-657- | US-09-738-626-4 | US-10-156-761- | US-10-145-415- | 0-214 |
| 14 14 | 14 | 14 | 14 | 14 | 14 | 15 | 14 | 15 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 7.4 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | Φ | 14 | 14 | 14 |
| 41.6 411 | 393 | 405 | 425 | 399 | 457 | 418 | 408 | 409 | 392 | 388 | 406 | 404 | 396 | 428 | 404 | 401 | 412 | 421 | 418 | 402 | 404 | 475 | 470 | 400 | 430 | 399 | 429 | 415 |
| 17.0 | 16.7 | 16.7 | 16.6 | 16.4 | 16.4 | 16.3 | 15.8 | 15.6 | 15.5 | 15.4 | 15.4 | 15.0 | 14.9 | 14.9 | 14.8 | 14.8 | 14.6 | 14.3 | 14.2 | 14.0 | 14.0 | 14.0 | 13.9 | 13.8 | 13.8 | 13.8 | 13.8 | 13.8 |
| 371.5 | 364 | 363 | 362 | 357.5 | 357.5 | 356 | 344.5 | 339 | 338 | 334.5 | 334.5 | 327 | 324.5 | 324 | 322.5 | 322 | 319 | 312 | 309 | 304.5 | 304.5 | 3.04 | 303 | 301.5 | 301.5 | 301 | 301 | 300.3 |
| 16 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 |

ALIGNMENTS

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Sequence 12, Application US/10453104
| Sequence 12, Application US/2031045541
| Sequence 12, Application No. US20031207345A1
| GENERAL INFORMATION:
| APPLICANT: California Institute of Technology;
| APPLICANT: Frances H. Arnold
| APPLICANT: Frances H. Arnold
| APPLICANT: Evances H. Arnold
| APPLICANT: Evances H. Arnold
| TITLE OF INVENTION: Oxygenase Enzymes and Screening Method
| FILE REPERBUCK: 4059/1082-1053
| CURRENT APPLICATION NUMBER: US 09/661,093
| PRIOR APPLICATION NUMBER: US 09/246,451
| PRIOR APPLICATION NUMBER: US 60/106,840
| PRIOR FILING DATE: 1999-02-29
| PRIOR FILING DATE: 1998-01-28
| PRIOR PRIOR OBTE: 1998-01-28
| PRIOR PRIOR OBTE: 1998-11-03
| PRIOR PRIOR OBTE: 1998-11-03
| PRIOR PLING DATE: 1998-11-03
| PRIOR FILING DATE: 1998-11-03
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Sequence 2, Application US/10453104
Publication No. US20030207345A1
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Best Local Simílarity
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TTETIQSNANLAPLPPHVPEHLVFDFDMYNPSNLSAGVQBAWAVLQBSNVPDLVWTRCNG
                                    TTETIQSNANLAPLPPHVPEHLVFDFDMYNPSNLSAGVQEAWAVLQESNVPDLVWTRCNS
                                                                            GHWIATRGOLIREAYEDYRHFSSECPFIPREAGEAYDFIPTSMDPPEGAGFRALANCWWS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 2
US-10-453-104-11
Sequence 11. Application US/10453104
Publication No. US20330207345A1
GENERAL INFORMATION:
GENERAL INFORMATION:
APPLICANT: California Institute of Technology;
APPLICANT: Frances H. Arnold
FILE REFERENCE: 4058/1R827-US3
CURRENT APPLICATION NUMBER: US/10/453,104
CURRENT FILING DATE: 2003-06-03
PRIOR PRILNG DATE: 2000-09-13
PRIOR PELLNG DATE: 1999-02-09
PRIOR PELLNG DATE: 1999-02-09
PRIOR FILING DATE: 1998-01-03
PRIOR FILING DATE: 1998-01-03
PRIOR PILING DATE: 1998-01-03
PRIOR APPLICATION NUMBER: US 62/086,206
PRIOR PILING DATE: 1998-01-03
PRIOR APPLICATION NUMBER: US 62/086,206
PRIOR PILING DATE: 1998-01-03
PRIOR PILING DATE: 1998-01-03
PRIOR APPLICATION NUMBER: US 62/086,206
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GHWIATRGQLIRBAYEDYRHFSSECPFIPREAGEAYDFIPTSMDPPEGRQFRALANQVVG 120
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  HLARREIIVTLKEWILTRIPDFSIAPGAQIQHKSGIVSGVQALPLVWDPATTKAV 414
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   361 HLARREIIVTLKEWLTRIPDFSIAPGAQIQHKSGIVSGVQALPLVWDPATTKAV
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TITLE OF INVENTION: Oxygenase Enzymes and Screening Method

TITLE OF INVENTION: Oxygenase Enzymes and Screening Method

FILE REFERENCE: 4058/12827-UG3

CURRENT APPLICATION NUMBER: US/10/453,104

CURRENT FILING DATE: 2003-06-02

PRIOR PELLING DATE: 2000-09-13

PRIOR APPLICATION NUMBER: US 09/661,033

PRIOR APPLICATION NUMBER: US 60/094,403

PRIOR APPLICATION NUMBER: US 60/106,840

PRIOR APPLICATION NUMBER: US 60/106,840

PRIOR APPLICATION NUMBER: US 60/106,840

PRIOR PILING DATE: 1998-11-03

PRIOR FILING DATE: 1998-05-21

PRIOR FILING DATE: 1998-05-21

PRIOR FILING DATE: 1998-11-03

NUMBER OF SEQ ID NOS: 19

SOFTWARE: FASLSEQ for Windows Version 3.0

SOFTWARE: Askars 12
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99.5%; Pred. No. 6.7e-211;
iive 1; Mismatches 1;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             GENERAL INFORMATION:
APPLICANT: California Institute of Technology;
APPLICANT: Frances H. Arnold
APPLICANT: Hyun Joo
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LTSDYEFHGVQLKKGDQILLPQMLSGLDERKNACPMHVDFSRQKVSHTTFGHGSHLCLGQ 360
                                                                                                                                                                                                                                                                                                                  Sequence 50, Application US/10214446; Publication No. US20030180742A1; GENERAL INFORMATICN:
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APPLICANT: Burk, Mark J.
APPLICANT: Hitchman, Tim
APPLICANT: Pujol, Catherine
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Best Local Similarity 27.9%
--- Afres 98; Conservative
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; ORGANISM: Bacterial
US-10-214-446-50
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           121 MPWUDKLENRIQELACSLIESLRPQSQCNFTEDYAEPFPIRIFMLLAGLPEEDIPHLKYL 180
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           240
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      300
   TDQMTRPDGSMTFAEAKEALYDYLIPIIEQRRQKPGTDAISIVANGQVNGRPITSDEAKR 240
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              9
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                                                                                                                                                                                                          301 LTSDXEEHGVCLKKGDQ1LLPQMLSGLDERENACPMHYDFSRQKVSHTTFGHGSHLCLGQ
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                                                                                                                                                                        LISDYEFHGVQLXKKGDQILLPQMLSGLDERKAKAPMHVDFSRQKVSHTTFGHGSHLCLGQ
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                                                                                                              MCGLLLVGGLDTVVNFLSFSMEFLAKSPEERQELIERPERIPAACEELLRRFSLVADGRI
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                                                          MCGLLLVGGLDTVVNFLSFSMEFLAKSPEFRQELIERPELIPAACEELLRRFSLVADGAT
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Fublication No. US20030207345A1
Fublication No. US20030207345A1
Fublication No. US20030207345A1
Fublication No. US20030207345A1
APPLICANT: Frances H. Arnold
APPLICANT: Frances H. Arnold
FILE REFERENCE: 40584/EB27-US3
CURRENT APPLICATION NUMBER: US/10/453,104
CURRENT APPLICATION NUMBER: US/09/661,093
FRIOR FILING DATE: 2000-09-13
FRIOR FILING DATE: 1999-02-09
FRIOR PELING DATE: 1999-02-09
FRIOR APPLICATION NUMBER: US 60/094,403
FRIOR PELING DATE: 1999-02-09
FRIOR PELING DATE: 1999-02-09
FRIOR APPLICATION NUMBER: US 60/006,840
FRIOR PELING DATE: 1999-11-03
FRIOR PELING DATE: 1999-10-03
FRIOR PE
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Best Local Similarity 99.5%; Pred. No. 3.5e-210;
Matches 412; Conservative 0; Mismatches 2;
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US-10-453-104-13
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         TYPE: PRT
ORGANISM: Artificial Seguence
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   181
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  214 KPGTDAISIVANGQVNGRPITSDEAKRACGLLLVGGLDTVVNFLSFSMEFLAKSPEHROE 273
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               206 NPGDDLVSLILSAESEGEWMTARQVLANCTQIIVAGHETTRNLVANGVELJJRYPEQRAE 265
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         -- DPPEQROFRALANQVVGMPVVDXLENRIQELACSLIESLRPQSQCNFTEDYAEPFPIR 161
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301 LTSDYBEFHGVQLKKGDQILLPQMLSGLJERKNACPMHVDFSRQKVSHTTFGHGSHLCLGQ
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                                                                                             414
                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Weiner, David
APPLICANT: Weiner, David
APPLICANT: Burk, Mark J.
APPLICANT: Hichman, Tim
APPLICANT: Hichman, Tim
APPLICANT: Pujol, Catherine
APPLICANT: Richardson, Toby
APPLICANT: Short, Jay M.
TITLE OF INVENTION: P450 ENZYMES, NUCLEIC ACIDS ENCODING
TITLE OF INVENTION: P450 ENZYMES, NUCLEIC ACIDS ENCODING
TITLE OF INVENTION: P450 ENZYMES, NUCLEIC ACIDS ENCODING
TITLE OF INVENTION: P450 ENZYMES, NUCLEIC ACIDS ENCODING
TITLE OF INVENTION: P450 ENZYMES, NUCLEIC ACIDS ENCODING
TITLE OF INVENTION: P450 ENZYMES, NUMBER: US 60/309,497
PRIOR APPLICATION NUMBER: US 60/309,497
PRIOR APPLICATION NUMBER: US 60/309,497
NUMBER: PASEQ ID NOS: 59
SOFFWARE: FASESEQ for Windows Version 4.0
SEQ ID NO 50
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          326 DDPDTFDLTRNPTGHLAFGWGPFVCVGAALAELEGQVSFRTLLDRLPGLEL 376
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         333 ACPMHVDFSRQKVSHTTFGHGSHLCLGQHLARREIIVTLKEWLTRIPDFSI 383
                                                                                                                                                        361 HLARREIIVTLKEWLTRIPDFSIAPGAQIQHKSGIVSGVQALPLVWDPATTKAV
                                                                                             HLARREIIVTLKEWLTRIPDFSIAPGAQIQHKSGIVSGVQALPLVWDPATTKAV
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27.9%; Pred. No. 8.4e-30;
Live 64; Mismatches 156; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      60 GGHWIATRGQLIREAYEDYRHFSSECPFIPREAGEAYDFIPTSM-
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17.3%; Score 378; DB 14; Length 399; 28.3%; Pred. Nc. 3e-29;
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29.4%; Pred. No. 1e-28;
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APPLICANT: IKEDA, HARUO
APPLICANT: ISHIKAWA, JUN
APPLICANT: SHIBA, TADAYCSHI
APPLICANT: SHIBA, TADAYCSHI
APPLICANT: SHTAK, YOSHIYUKI
APPLICANT: SAKAKI, YOSHIYUKI
APPLICANT: HATTORI, MASAHIRA
FILE REFERENCE: 249-262
CURRENT APPLICATION NUMBER: US/10/156,761
CURRENT APPLICATION NUMBER: UP 2001-204089
PRIOR FILING DATE: 2001-05-30
PRIOR FILING DATE: 2001-05-30
PRIOR FILING DATE: 2001-05-30
PRIOR FILING DATE: 2001-05-30
PRIOR FILING DATE: 2001-05-30
NUMBER OF SEQ ID NOS: 15109
SEQ ID NO 14997
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ; Sequence 14997, Application US/10156761; Publication No. US20030119318A1; GENERAL INFORMATION:
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US-10-156-761-14997
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Best Local Similarity
Matches 105; Conserv
                                                                                   Local Similarity
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        US-10-314-657-37
                                                                                                           Matches 111;
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                                                        Query Match
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Publication No. US20030175888A1
GENERAL INFORMATION:
APPLICANT: SHEN, Ben
APPLICANT: CHENG, Yi-Qiang
APPLICANT: TANG, Osng-Li
TITLE OF INVENTION: Synthases and Methods of Use
FILE REFERENCE: 054030-0221
CURRENT APPLICATION NUMBER: US/10/314,657
CURRENT PILING DATE: 2002-12-09
PRIOR APPLICATION NUMBER: PCT/US02/08937
PRIOR APPLICATION NUMBER: US/10/314,657
PRIOR APPLICATION NUMBER: 2002-12-09
PRIOR APPLICATION NUMBER: 2002-03-22
PRIOR PILING DATE: 2001-03-26
PRIOR PILING DATE: 2001-03-26
PRIOR PILING DATE: 2001-03-26
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       252 QIPNEVVTLLDRPEQWNRLREDPELVPTAVEELM-RFVPLGSGASFPRYATEDVEVGGTL 310
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             133 DKWVATGAPVDLVEZFALPVPVGVICQLLGVPVEJRPRFRAWSD-AALSTSSLTAEEFDA 191
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          312 LKKGDQILLPQMLSGLDERKNACPMHVDFSRQKVSHTTFGHGSHLCLGQHLARREIIVTL 371
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                                                                                                                                                                                                                                                                                                                                                                                                                                                    Length 404;
APPLICANT: Richardson, Toby
APPLICANT: Short, Jay M.
TITLE OF INVENTION: P450 ENZYMES, NUCLEIC ACIDS ENCODING
TITLE OF INVENTION: THEM AND METHODS OF MAKING AND USING THEM
FILE REFERENCE: 09010-500001
CURRENT APPLICATION NUMBER: US/10/214,446
CURRENT APPLICATION NUMBER: US 60/309,497
PRIOR APPLICATION NUMBER: US 60/309,497
PRIOR APPLICATION NUMBER: US 60/309,497
NUMBER OF SEQ ID NOS: 59
SOFTWARE: FASTSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                                                                                                                                                                                                              17.6%; Score 382.5; DB 14; Length ilarity 30.3%; Pred. No. 1.1e-29; Conservative 58; Mismatches 187; Indels
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SOFTWARE: Patentim version 3.2
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Best Local Similarity
Matches 120; Conserv
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US-10-314-657-37
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LENGTH: 399
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                                                                                     74 RITPLARRSDII-LSLDPPSHTRRRLLSKAFTARRMGAMOSWLEELFAGLLDGVERTGH
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                                                                                                                                                                                                                                                                                                                                                                   200 LYDYLIPIIEQRROKPGTDAISIVANGQVNGRPITSDEAKRMCGLLLVGGLDTVVNFLSF
                                                 38 VQEAWAVLQESNVPDLVWTRCNGGHWIATRGQLIREAYEDYRHFSSECPFIPREAGE---
                                                                                                                                                                                                                                                             148 -CNFTEDYAEPFPIRIFMLLAGLPEEDIPHLKYLTDQMTRPDGSMTFAEAKE----A
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Mismatches 175;
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GENERAL INFORMATION:
APPLICANT: Sherman, D.H.
APPLICANT: Liu, H.
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Patent No.
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                                                     HDFFESQSRRLLAGPGIAEVQDARAQLDDYLYALIDRKRREPGDGLLDDLIGGGLNRGTV 240
                                                                                                                         241 DRAELVSLATLLLIAGHETTANMISLGTFTLLRHPEQLAELRAEPGLMPAAVBELL-RFL 299
                                                                                                                                                                                   294 LVADG--RILISDYEFHGVQLKKGDQILLPQMLSGLDERKNACPMHVDFSRQKVSHTTFG 351
                                                                                                                                                                                                                          300 SIADGLIRVATEDIEVAGTTIRADEGVVFATSVINRDAAGRAEPDALDWHRSARHHVAFG 359
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             174 IPHLKYLTDQMTRPDGSMTFAEAKEALYDYLIPIIEQRRQKPGTDAISIVAMGQVNGRPI 233
                                                                                                                                                                                                                                                                       352 HGSHLCLGQHLARREIIVTLKEWLKRIPDFSI-APGAQIQHKSG-IVSGVQALPLVW 406
                                                                                                                                                                                                                                                                                                  360 FGIHQCLGQNLARAEMEIALGTLFERLPGLRLAAPADEIPFKPGDTIQGMLBLEVTW 416
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                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 39, Application US/09861289
Fatent No. US202011C897A1
GENERAL INFORMATION:
APPLICANT: Biu, H.
APPLICANT: Liu, H.
APPLICANT: Alao, I.
TILLE OF INVENTION: DNA encoding methywycin and pikromycin
FILE REFERRANCE: 600.4380NS1
CURRENT FILING DATE: 2001.05-18
FRIOR APPLICATION NUMBER: 09/105,537
PRIOR APPLICATION NUMBER: 09/105,537
PRIOR APPLICATION NUMBER: 09/105,537
PRIOR APPLICATION NUMBER: 09/105,537
NUMBER OF SEQ ID NOS: 43
SOFTWARE: FastSEQ for Windows Version 3.0
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US-09-860-846-39
; Sequence 39, Application US/09860846
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ORGANISM: Streptomyces venezuelae
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76 EDYRHFSSECPFIPREAGEAYDFIPTSMDPPEQRQFRALANQVVGMPVVDXLENRIQELA 135
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APPLICANT: Xue, Y.
APPLICANT: Zhao, L.
TITLE OF INVENTION: DNA encoding methymyci: and pikromycin FILE REFRENCE: 600.438USI
CURRENT APPLICATION NUMBER: US/09/860,846
CURRENT FILING DAIE: 2001-05-18
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APPLICANT: Liu, H.
APPLICANT: Xue, Y.
APPLICANT: Zhao, L.
APPLICANT: DAS, L.
FILE OF INVENTION: DNA encoding methymycin and pikromycin
FILE REFERRNCE: 600.536US1
CURRENT APPLICATION NUMBER: US/09/988,3848
CURRENT FILING DATE: 2001-11.19
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                                                                                                                                                                                               CURRENT FILING DATE: 2001-05-18
PRIOR APPLICATION NUMBER: 09/105,537
PRIOR FILING DATE: 1998-06-26
NUMBER OF SEQ ID NOS: 43
SOFTWARE: FastSEQ for Windows Version 3.3
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PRIOR FILING DATE: 1999-06-25
PRIOR APPLICATION NUMBER: US 09/105,537
PRIOR FILING DATE: 1998-06-26
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// Publication No. US20030073824A1
// GENERAL INFORMATION:
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303 DLDGTVIPAGDIVLVVLADAHRTPERPDFHRFDIRRDTAGHLAFGHGIHFCIGAPLARL 362
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APPLICANT: MANGHIEL, ROBERT
ITLE OF INVENTION: RECOMBINANT NARBCNOLIDE POLYKETIDE SYNTHASE
FILE REPRENCE: 3.0662200121
CURRENT APPLICATION NUMBER: US/09/793,708
CURRENT APPLICATION NUMBER: US 09/657,440
PRIOR PRILING DATE: 2001-09-07
PRIOR FILING DATE: 1099-05-27
PRIOR FILING DATE: 1999-05-27
PRIOR FILING DATE: 1999-06-67
PRIOR FILING DATE: 1998-06-6
PRIOR FILING DATE: 1998-06-06
PRIOR FILING DATE: 1998-06-06
PRIOR PRILING DATE: 1998-06-06
PRIOR PRILING DATE: 1998-06-06
PRIOR APPLICATION NUMBER: US 09/846,247
PRIOR PLILING DATE: 1999-05-20
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                                                                                                                  363 BARIAVRALLERCPDLALDVSPGELVWYPNPMIRGLKALPIRM 405
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                                                                                  366 ELIVILKEWLIRIPDFS--LAPGAQIQHKSGIVSGVQALPLVW 406
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APPLICANT: BETLACH, Melanie C.
APPLICANT: BETLACH, Mary C.
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SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 18
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                                                       21;
  Query Match 17.0%; Score 371.5; DB 10; Length 416; Best Local Similarity 28.6%; Pred. No. 1.4e-28; Matches 98; Conservative 62; Mismatches 162; Indels 21;
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APPLICANT: Zhao, I.
APPLICANT: Zhao, I.
TITLE OF INVENTION: DNA encoding methywycin and pikromycin FILE REFERENCE: 600.438US1
CURRENT APPLICATION WIMBER: US/09/836,821
CURRENT PILING DATE: 2001-04-17
PRIOR APPLICATION WUMBER: 09/105,537
PRIOR FILING DATE: 1998-06-26
SOFTWARE: FASELSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           62; Mismatches 162; Indels
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Pred. No. 1.4e-28;
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; Sequence 39, Application US/09836821
; Publication No. US20030087405A1
; GENERAL INFORMATION:
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Best Local Similarity
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                                                         APPLICANT: ASELEY, Gary
APPLICANT: ASELEY, Gary
APPLICANT: BILACH, Malanie C.
APPLICANT: BILACH, Malanie C.
APPLICANT: BILACH, Mary
APPLICANT: MCDANIEL, ROCET
TITLE CANDANTIEL, ROCET
TITLE CF INVENTION: COMBINATORIAL POLYKETIDE LIBRARIES PRODUCED USING A MODULAR
TITLE CF INVENTION: PKS GENE CLUSTER AS SCAFFOLD
TITLE CF INVENTION: PKS GENE CLUSTER AS SCAFFOLD
TITLE CF INVENTION: PKS GENE CLUSTER AS SCAFFOLD
TITLE CF INVENTION WUMBER: US 09/141,900
PRIOR FILING DATE: 1998-08-28
PRIOR FILING DATE: 1998-05-06
PRIOR FILING DATE: 1998-05-06
NUMBER: OF SEQ ID NOS: 32
SOFILD NO 13
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US-10-160-539-18
Sequence 18, Application US/10160539
Publication No. US2030162262A1
GENERAL INFORMATION:
APPLICANT: ASHLEY, Gary
APPLICANT: BETLACH, Mary C.
APPLICANT: MCDANIEL, Robert
APPLICANT: TANG, Li
TITLE OF INVENTION: RECOMBINANT NARBONOLIDE POLYKETIDE SYNTHASE
FILE REFERENCE: 300620220
CURRENT APPLICATION NUMBER: US/10/160,539
CURRENT APPLICATION DATE: 2002-05-29
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 21;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  17.0%; Score 371.5; DB 14; 28.6%; Pred. No. 1.4e-28; active 62; Mismatches 162;
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PRIOR FILING DATE: 2000-09-07
PRIOR APPLICATION NUMBER: 09/320,878
PRIOR FILING DATE: 1999-05-27
PRIOR APPLICATION NUMBER: CIP OF 09/141,908
Sequence 13, Application US/10201365
Publication No. US20030148469A1
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Streptcmyces venezuelae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
Best Local Similarity 28.64
Matches 98; Conservative
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TYPE: PRI
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188 QTAMAEYSGYLSRLIDSKRGQDGEDLISALVRTSDEDGSRLTSEBLLGYAHILLVAGHET 247
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28.6%; Pred. No. 1.4e-28;
tive 62; Mismatches 162;
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                                                                                                                                                                               ) ORGANISM: Streptomyces venezuelae
US-10-160-539-18
PRIOR FILING DATE: 1999-08-28
NUMBER OF SEQ ID NCS: 34
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 18
LENGTH: 416
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GenCore version 5.1.6
Copyright (c) 1393 - 2004 Compugen Ltd.
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using sw model protein search, OM protein

April 6, 2004, 18:49:16; Search time 14.9588 Seconds (without alignments) 1428.803 Million cell updates/sec Run on:

Title: Perfect score:

US-09-246-451A-12 2179 1 TTETIÇSNANLAPLPPHVPE. Sequence:

.....IVSGVQALPLVWDPATTKAV

BLOSUM62 Gapop 10.0 , Gapext 0.5 Scoring table;

389414 segs, 51625971 residues Searched: Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0 Maximum DB seq length: 20000000000

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries

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/cgn2_6/ptodata/2/jaa/6A_COMB.pep:*
/cgn2_6/ptodata/2/jaa/6B_COMB.pep:*
/cgn2_6/ptodata/2/jaa/PCTUS_COMB.pep:*
/cgn2_6/ptodata/2/jaa/PCTUS_COMB.pep:* Issued Patents AA:* Database

Pred. Mo. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| | Description | Sequence 18, Appl | 39 | 13, | 18, | 1783 | 521 | 12, | 12, | 12, | . 521 | Sequence 10, Appl | Ϊ | 11, | ထ် | 77 | œ | œ | œ | œ | œ | 8 | 125 | 3243 | 20 | 'n | Sequence 5, Appli | œ |
|-----------|--------------------------|-------------------|------------------|------------------|------------------|----------------------|-----------|------------------|------|------------------|-----------|-------------------|------------------|-------------------|-----------------|------------------|-----------------|------------|-----------------|-------|-------|-----------------|---------|----------|------------------|-----------------|-------------------|-----------------|
| | Des | Se | Se | Se | Se | Se | Pat | Se | Se | S | Pat | Š | Se | ŝ | Se | S | s, | G) | Q) | S) | ςÿ | s. | ů, | c) a) | Š | cy e | S | cy o |
| SUMMAKLES | ID | US-09-320-878-18 | US-09-105-537-39 | US-09-141-908-13 | US-09-657-440-18 | US-09-252-991A-17836 | 5212296-9 | US-09-385-028-12 | 4-1 | US-09-385-040-12 | 5212296-6 | US-08-765-907A-10 | US-08-102-863-11 | PCT-US92-10885-11 | US-09-335-409-8 | US-09-413-814-71 | US-09-568-102-8 | 09-567-969 | US-09-568-480-8 | -60 | 60 | US-09-567-899-8 | 19-266- | -09-2 | US-09-679-279-20 | US-09-096-982-5 | US-08-653-650A-5 | US-09-096-982-8 |
| | BB | m | ť | đ, | | 4 | 9 | m | 4 | 4 | Ø | 4 | -1 | ŀÜ | m | 'n | 4 | | Ţ | | • | ধ্য | ণ | • | T | | | N |
| | Query Match Length DB | 416 | 416 | 416 | 416 | 437 | 403 | 40.9 | 4.09 | A. | 406 | E. | 412 | 412 | 419 | 419 | 419 | 419 | 419 | 419 | 419 | 419 | 395 | 468 | 189 | 422 | 422 | 474 |
| οNo | Query | 17.0 | 17.0 | 17.0 | 17.0 | 16.3 | 15.9 | 15.6 | 15.6 | 15.6 | 15,4 | | | | | | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.7 | 12.2 | 11.0 | 8.0 | 7.3 | 7.3 | 7.3 |
| | Score | 371.5 | 371.5 | 371.5 | 371.5 | 355 | 346 | 339 | 339 | 339 | 336 | 323.5 | 315 | 315 | 277.5 | 277.5 | 277.5 | 277.5 | 277.5 | 277.5 | 277.5 | 277.5 | 265 | 240 | 174.5 | ø | 160 | 160 |
| | Result No. | | 2 | 'n | 4 | ເດ | ý | 7 | œ | σv | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 13 | 13 | 20 | 21 | 22 | 23 | 24 | 1251 | 13.6 | 27 |

| Sequence 8, Appli | Sequence 9, Appli | Sequence 9, Appli | Sequence 2, Appli | Sequence 2, Appli | Ŋ | Sequence 7, Appli | Sequence 7, Appli | 1, | Sequence 22, Appl | Sequence 4, Appli | Sequence 24, Appl | Sequence 16, Appl | Sequence 2, Appli | Sequence 2, Appli | Sequence 4, Appli | Sequence 642, App | Sequence 2, Appli |
|-------------------|-------------------|-------------------|-------------------|-------------------|------------------|-------------------|-------------------|-----------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| Sed | Sedi | 3, | ٠, | ~, | ٠, | 0, | | -, | Ο, | -, | -, | -, | Sedi | Sed | Sedi | Sedi | Sedi |
| US-08-653-650A-8 | US-09-096-982-9 | US-08-653-650A-9 | US-08-396-218-2 | US-08-760-116-2 | US-08-194-981E-5 | US-09-320-878-7 | US-09-141-908-7 | US-09-657-440-7 | US-09-105-537-22 | US-09-105-537-4 | US-09-126-420A-24 | US-09-215-694-16 | US-09-583-447A-2 | US-09-144-367-2 | US-09-583-447A-4 | US-09-976-594-642 | US-08-906-791-2 |
| CI | N | N | Н | Н | N | e | 4 | 4 | 'n | m | 4 | 4 | 4 | 4 | 4 | 4 | m |
| 474 | 443 | 443 | 422 | 422 | 512 | 382 | 382 | 382 | 402 | 3782 | 524 | 516 | 503 | 503 | 504 | 504 | 501 |
| 7.3 | 7.2 | 7.2 | 7.1 | 7.1 | 6.2 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 5.9 | 5.8 | 5.5 | 5.5 | 5.5 | 5.5 | 5.5 |
| 160 | 157 | 157 | 155 | 155 | 135 | 129.5 | 129.5 | 129.5 | 129.5 | 129.5 | 127.5 | 127 | 120.5 | 120 | 120 | 119.5 | 119 |
| 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 6 6 | 40 | 41 | 42 | . 43 | 44 | 45 |

ALIGNMENTS

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76 EDYRHFSSECPFIPREAGEAYDFIPTSMDPPEQRQFRALANQVVGMPVVDKLENRIQELA 135
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              72 KDWR--NSTIPLIBAEAALNHNMLES--DPPRHIRLRKLVAREFIMRRVELLRPRVQEIV 127
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APPLICANT: BETLACH, Melanie C.
APPLICANT: BETLACH, Mary C.
APPLICANT: MODANIEL, Robert
APPLICANT: TANG, Li
TITLE OF INVENTION: RECOMBINANT NARBONOLIDE POLYKETIDE SYNTHASE
FILE REFERENCE: 300622002120
CURRENT APPLICATION UNBER: US/09/320,878A
CURRENT FILING DATE: 1999-05-27
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EARLIER FILING DATE: 1998-08-28
EARLIER FILING DATE: 1998-08-28
EARLIER FILING DATE: 1998-08-08
EARLIER FILING DATE: 1998-05-06
EARLIER APPLICATION NUMBER: CIP OF 08/846,247
EARLIER APPLICATION NUMBER: G0/119,139
EARLIER APPLICATION NUMBER: 60/119,139
EARLIER FILING DATE: 1999-02-08
EARLIER FILING DATE: 1998-05-22
EARLIER FILING DATE: 1998-05-28
EARLIER FILING DATE: 1998-05-28
EARLIER APPLICATION NUMBER: 60/087,080
EARLIER APPLICATION NUMBER: 60/087,080
EARLIER APPLICATION NUMBER: 60/087,080
EARLIER APPLICATION NUMBER: 60/087,080
WUMBER OF SEQ ID NOS: 34
SOFTWARE: PATENTIN VOY: 2.0
                         Sequence 18, Application US/09320878A Patent No. 6117659
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; ORGANISM: Streptomyces venezuelae
US-09-320-878-18
US-09-320-878-18
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Query Match
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                                                                                                                                         --HGVQLKKGDQILLPQMLSGLDERKNACPMHVDFSRQKVSHTTFGHGSHLCLGQHLARR 365
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VVNFLSFSMEPLAKSPEHRQELIERPELIPAACEELLRRFSLVADGRILTSDYEF.
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US-09-106-537-39
Sequence 39, Application US/09105537A
Sequence 39, Application US/09105537A
Sequence 30, Application US/09105537A
Setulation Section                                                                                                                                                                                                                                                                                           EIIVTLKEWLTRIPDES--IAPGAQIQHKSGIVSGVQALPLVW 406
                                                                                                                                                                                                                                                                                                                                           EARIAVRALLERCEDLALDVSPGELVWYPNPMIRGLKALPIRM 405
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US-09-105-537-39
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Best Local Similarity
Matches 98; Conserv
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Sequence 13, Application US/09141908 Patent No. 6503741

US-09-141-908-13

GENERAL INFORMATION:
APPLICANT: ASHLEY, Gary
APPLICANT: BETLACH, Melanie C.
APPLICANT: BETLACH, Mary
APPLICANT: MCDANIEL, Robert
APPLICANT: TANG, Li

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76 EDYRHFSSECPFIPREAGEAYDFIPTSMDPPEQRQFRALANQVVGMPVVDKLENRIQELA 135
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  307
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   128 DGLVDAMLAAPDGRADIMESLARPLPITVISELLGVPEPDRAAFRVWIDAFVFPDDPAGA
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                            Produced Using
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APPLICANT: BETLACH, Melanie C.
APPLICANT: BETLACH, Mary C.
APPLICANT: TANG, Li
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APPLICANT: 1001-00-07
APPLICANT: 1001-00-07
APPLICANT: 1001-00-07
APPLICANT: APPLICATION NUMBER: CIP OF 09/141,908
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TITLE OF INVENTION: Combinatorial Polyketide Libraries Productive OF INVENTION: Combinatorial Polyketide Libraries Productive OF INVENTION: Modular PKS Gene Cluster as Scaffold CURRENT APPLICATION NUMBER: US/09/141,908

CURRENT FILING DATE: 1998-08-28

CURRENT FILING DATE: 1998-06-06

EARLIER APPLICATION NUMBER: CIP OF 09/073,538

EARLIER FILING DATE: 1998-04-30

EARLIER FILING DATE: 1998-03-05

EARLIER PRING DATE: 1998-03-05

EARLIER FILING DATE: 1998-03-05

EARLIER FILING DATE: 1998-03-05

EARLIER FILING DATE: 1998-05-28

NUMBER: OF SEQ ID NOS: 31
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1 Similarity 28.6%; Pred. No. 7.7e-31;
98; Conservative 62; Mismarches 162;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       LENGTH: 416; TYPE: PRT: ORGANISM: Streptomyces venezuelae: US-09-141-908-13
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SEQ ID NO 13
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us-09-246-451a-12.rai

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13;
                                                       289 PNAMEELVRHDSPVRASMIRFTVEDVELDGVTIPAGEYILVSNLTANHDAERFDDPDRLD 348
                  282 PAACEELLRRFSLVADG--RILTSDYEFHGVQLKKGDQILLPQMLSGLDERKNACPMHVD 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                340 FSRQKVSHTTFGHGSHLCLGQHLARREIIVTLKEWLTRIPDFSIA-PGAQIQHKSGIVSG 398
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       116 NOVVGMPVVDKLENRIQELACSLIESLRP-QGQCNFTEDYAEPFPIRIFMLLAGLPEEDI 174
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       175 PHL----KYLTDQMTRPDGSMTFAEAKEALYDYLIPIIEQRRQKPGTDAIS-IVANGQVN 229
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            228 DIQIAT-----MGRILLIVAĞHETTANMTALSTLVILRNPDQLARLRABPALVKGAVBELL 282
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                                                                                                                                         349 LTRNTDGHLGYGFGVHYCVGASLARLEGRIAIQRLLARFPDLQLAVPHAELQ--
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A.
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TITLE OF INVENTION: EXPRESSION OF HERBICIDE METABOLIZING
(CYTOCHROMES
                                                                                                                                                                                                                                                                                                                                                ;Patent No. 3212296
; APPLICANT: DEAN, CAROLINE;HARDER, PATRICIA A.;LETO,
;J.; O'KEEFE, DANIEL P.;OMER, CHARLES A.;ROMESSER, JAMES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    63; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/569,781
FILING DATE: 23-AUG-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 464,499
FILING DATE: 12-JAN-1990
APPLICATION NUMBER: 405,605
FILING DATE: 11-SEP-1989
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US-09-385-028-12
; Sequence 12, Application US/09385028
; Eatent No. 6222106
; GENERAL INFORMATION:
                                                                                                                                                                                                399 VQALPLVWDPAT 410
                                                                                                                                                                                                                                         ---WLPIT 405
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Matches 106; Conservative
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APPLICANT: MARC. Rubenfield et al.

TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDCMONAS TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS

CURRENT APPLICATION NUMBER: US/05/252,991A

CURRENT FILING DATE: 1999-02-18

PRICR APPLICATION NUMBER: US 60/074,788

PRICR FILING DATE: 1998-02-18

PRICR FILING DATE: 1998-02-18

PRICR FILING DATE: 1998-02-18

SEQ ID NO 17836

LENGHE: 437
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                                                                                                                                                                                              KDWR--NSTTPLTEABAALNHNMLES--DPPRHTRLKKLVAREFTWRRVELLRPRVQEIV 127
                                                                                                                                                                                                                                         136 CSLIESL--RPQGQCNFTEDYAEPFPIRIFMLLAGLPEEDIPHLKYLTDQMTRPDGSMTF 193
                                                                                                                                                                                                                                                                                                                                                                                                                                                 --HGVQLKKGDQILLPQWLSGLDERKNACPMHVDFSRQKVSHTTFGHGSHLCLGQHLARR 365
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 DLDGTVIPAGDTVLVWLADAHRTPERFPDPHRFDIRRDTAGHLAFGHGIHFCIGAPLARL 362
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                                                                                                                                                                                                                                                                                                                                                                                                                     WWFLSFSMEFLAKSPEHRQELIERPELIPAACEELLRRFSLWADGRILTSDYEF---- 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          WITTR-----YRDARKVINH-PGVRRDARQAAELYAKRIGSPRAGIGEGLSHHMINLD 111
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                                                                                                                                                                                                                                                                                                                                194 ABAKEALYJYLIPIIBQRRQKPGTDAIS-IYANGQVNGRPITSDBAKRMOGLLLVGGLDŢ
                                                                                                                                                  76 EDYRHFSSECPFIPREAGEAYDFIPTSMDPPEQRQFRALANQVVGMPVVDKLENRIQELA
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                                                                                                              Gaps
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                                                                  Length
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Indels
                                                                                                         Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | : :: | | | : :: | : | EBRIAVRALLERCPOLALDVSPGELVWYPNPMIRGLKALPIRW 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               EIIVTLKEWLTRIPDFS--IAPGAQIQHKSGIVSGVQALPLVW 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            ; DB 4; Le:
4.8e-29;
ches 158;
                                                                                                         Mismatches 162;
                                                                DB 4;
                                                             Score 371.5; DB Pred. No. 7.7e-31
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            16.3%; Score 355; DB 25.8%; Pred. No. 4.8e iive 68; Mismatches
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   WIATRGOLIREAYEDYRHFSSECPFIPREA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Sequence 17836, Application US/09252991A Patent No. 6551795 GENERAL INFORMATION:
ORGANISM: Streptomyces venezuelae
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              ; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-17836
                                                                                                           62;
                                                                17.0%;
28.6%;
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Best Local Similarity 25.8°
Matches 96; Conservative
                                                                                                           Conservative
                                                                                Local Similarity
es 98; Conserv
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         ) OKUMMISM: SU
US-09-657-440-18
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                                                                  Query Match
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75 YEDYRHFS-SECPFIP-----REAGEAYDFIPTSMDPPEQRQFRA-----LANQV 118
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     178 K----YLTDQMTRPDGSMTFAEAKEALYDYLIPIIEQRRQXFGTDAISIVANGQVNGRPI 233
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   119 VGM-PVVDKLENRIQELACSLIESLRPQGQCNFTEDYAEPPPIRIFMLLAGLPEEDIPHL 177
       352 FGWHQCLGQWLARVELEEILAAVLRWM---PGARLAVPFEELDFRHEVSSYGLGALPVTW 408
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 16 PHVPEHLVFDFDMYNPSNLSAGVQEAWAVLQESNVPDLVWTRCNGGH-WIATRGQLIREA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 14 PAYPMHRVCPVD---PPPQLAGIRSQKAASRVT----LW---DGSQVWLVTSHAGARAV
                                                                                                                                                                                                                                                                                                                                  APPLICANT: Kwamena A Aidoo
APPLICANT: Ashish S. Paradkar
ATTLE OF INVENTION: DNA Sequence Encoding Enzymes of Clavulanic
TITLE OF INVENTION: DNA Sequence Encoding Enzymes of Clavulanic
Patent No. 6514735
TITLE OF INVENTION: Acid Biosynthesis
NUMBER OF SEQUENCES: 25
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      .....
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ADDRESSEE: JACOBSON, PRICE, HOLMAN & STERN, PPLC STREET: The Jenifer Buliding, 400 Seventh Street, N.W. CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/726,614
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/790,462
FILING DATE: 29-074-1397
ATTOMNEY AGENT INFORMATION:
NAME: D. DOUGLAS FRICE
REGISTRATION NUMBER: 24,514
REFERENCE/DOCKET NUMBER: 1418/P57452
TELEPHONE: (202 639-6666
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                              Sequence 12, Application US/09726614
Patent No. 6514735
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             TELEFEX: (202) 39305350
TELEX: RCA 248593 IDEA UR
INFORMATION FOR SEQ ID NO: 12:
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APPLICANT: Susan E. Jensen
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      LENGTH: 409 amino acids
TYPE: amino acid
STRANDEDNESS: single
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Best Local Similarity 29.2%
Matches 123; Conservative
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MOLECULE TYPE: protein
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MEDIUM TYPE: Floppy
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409 Z 409
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TELEFAX: (2
TELEX: RCA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       232 RVEEMVPMCRLLLVAGHGTTTSQASLSLLSLLTDPELAGRLTEDPALLPKAVEELLRFHS 291
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   119 VGM-PVVJXLENRIQELACSLIESLRPQGGCNFTEDYABPFPIRIFMLLAGLPEEDIPHL 177
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    16 PHVPEHLVFDFDMYNPSNLSAGVQEAKAVLQESNVPDLVWTRCNGGH-WIATRGQLIREA 74
APPLICANT: Kwamena A Aidoo
APPLICANT: Ashish S. Paradkar
TITLE OF INVENTION: DNA Sequence Encoding Enzymes of Clavulanic
Patent No. 6232106
TITLE OF INVENTION: Acid Biosynthesis
NUMBER OF SEQUENCES: 25
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                                                                                                                                                                                                         ADDRESSEE: JACOBSON, PRICE, HOLMAN & STERN, PPLC STREET: The Jenifer Buliding, 400 Seventh Street, N.W. CITY: Washington
                                                                                                                                                                                                                                                                                                                                                       COMPUTER REMARKE FORM:
MEDIUM TYPE: Flopy disk
COMPUTER: 1BM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30 (EPC)
APPLICATION NUMBER: US/09/385,028
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            REGISTRATION NUMBER: 24,514
REFERENCE/DOCKET NUMBER: 1418/P57452US2
TELECHMANICATION INFORMATION:
TELECHCATC. (202 638-666
TELEFAX: (202) 39305350
TELEFAX: (202) 39305350
INFORMATION FOR SEQ 1D NO: 12:
SEQUENCE CHARACTERISTICS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/790,462
FILING DATE: 29-UAN-1997
ATTORNEY/AGENT INFORMATION:
NAME: D. DOUGLAS PRICE
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amino acid
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                                                                                                                                                                                                                                                                                           STATE: D.C.
COUNTRY: U.S.A.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   CLASSIFICATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     STRANDEDNESS:
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197 KERLYDYLIPIIEQRRQKPGTDRI-SIVANGQVNGRPITSDEAKRMCGLLLVGGLDTVVN 255
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     314 KGDQILLEQMLSGLDERKNACPMHVDFSRQKVSHTTFGHGSHLCLGQHLARREIIVTLKE 373
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          312 AGEGVIVVNSIANRDGTVYEDPDALDIHRSARHHLAFGFGVHQCLGQNLARLELEVILNA 371
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             17 PSNRSCPYQLPDGYAQLRDTPGPLHRVTLYDGRQAWVVTKHEAARKLLGDPRLSSNRTDD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             77 NPPATSPAREAVRESPOAF----IGLDPPEHGTRRRMTISEFTVKRIKGMRPEVEEVVHG
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    80 HESSECPFIP--REAGEAYDFIPTSMDPPEQRQFRALANQVVGMPVVDKLENRIQELACS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          133 FLDEMLAAGPTADLVSQPALPVPSMVICRLLGVPYADHEFFQDASKRLVQSTDAQSALTA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    31 PSNLSAGVQ--EAWAVLQESNVPDLVWTRCNGGH-WIATRGCLIREAYEDYR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Length 406
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al Similarity 26.6%; Pred. No. 4.6e-27;
105; Conservative 74; Mismatches 192; Indels
                                                                                                                                                                          APPLICANT: DEAM, CAROLINE; HARDER, PATRICIA A.; LETO, KENNE; J.O.YEREF, DANNEL P.; OMER, CHARLES A.; ROMESSER, JAMES A.; TEPPERNAN, JAMES M. TITLE OF INVENTION: EXPRESSION OF HERBICIDE METABOLIZING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       374 WITRIPDESIA-PGAQIQHKSG-IVSGVQALPLVW 406
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 NUMBER OF SEQUENCES: 19
CJREENT APPLICATION DATA:
APPLICATION NUMBER: US/07/569,781
FILING DATE: 23-AUG-1990
FRIOR APPLICATION DATA:
APPLICATION NUMBER: 464,499
FILING DATE: 12-JAN-1990
APPLICATION NUMBER: 465,605
FILING DATE: 11-SEP-1989
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               BLANC, Veronique
THRAUT, Denis
BAMAS-JACQUES, Nathalie
BLANCHE, Francis
COUZET, Joel
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 10, Application US/08765907A
Patent No. 6352839
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DEBUSSCHE, Laurent
FAMECHON, Alain
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          GENERAL INFORMATION:
APPLICANT: BLANC, V
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APPLICANT:
APPLICANT:
APPLICANT:
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APPLICANT:
APPLICANT:
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Best Local S:
Matches 105
                                                     409
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                                                                                                                                     5212296-6; Patent No.
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                                                                                                                    294 LVADG--RILTSDYEFHGVQLKKGDQILLFÇMLSGLDERKNACPMHVDFSRQKVSHTTFG 351
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175 EDRSAVLIDRGYTPE---QVAKARDELDGYLRELVBERIENPGTDLISRLVIDQVRPGHL 231
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                                                                                                                                                292 IVQNGLARAAVEDVQLDDVIIRAGEGVVLSLSAGNRDETVFPDPDRVDVDRDARRHLAFG
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                                                                             232 RVEEMVPMCRLLLVAGHGTTTSQASLSLLTTDPBLAGRLTEDPALLPKAVEELLRFHS
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APPLICANT: Addo, Kwamena A
APPLICANT: Paradkar, Ashish S
TITLE OF INVENTION: DNA SEQUENCE ENCODING ENZYMES OF CLAVULANIC ACID
TITLE OF INVENTION: BIOSYNTHESIS
FILE REFERENCE: 09/385,040
CURRENT APPLICATION KUMBER: US/09/385,040
CURRENT PILING DATE: 1999-08-30
PRIOR FILING DATE: 1997-01-29
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US-09-385-045-12
                                                                                                                                                                                                                                                                                                                                                                                                                           Sequence 12, Application US/09385040 Patent No. 6589775 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  NUMBER OF SEQ ID NOS: 25
SOFTWARE: Patentin Ver. 2.1
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103 MDPPEQROFRALANQVVGMPVVDKLENRIQELACSLIESLRPQG-QCNFTEDYAEPFPIR 161
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Length 412;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                              14.5%; Score 315; DB 1; I 27.2%; Pred. No. 8.2e-25; trive 56; Mismatches 163;
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GENERAL INFORMATION:
APPLICANT: SARIASLANI, SIMA
TITLE OF INVENTION: CONSTITUTIVE
TITLE OF INVENTION: EXPRESSION OF P450SOY
TITLE OF INVENTION: STREPTOMYCES
NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     ADDRESSEE: E. I. DU PONT DE NEMOURS
ADDRESSEE: AND COMPANY
                                       FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/807,001
FILING DATE:
ATTORNEY/AGENT INFORMATION:
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                 US/08/102,863
                                                                                                                                                          NAME: GALLEGOS, R. THOMAS
REGISTRATION NUMBER: 32,692
REFERENCE/DOCKET NUMBER: CR.
TELECCHMIUNICATION INFORMATION:
TELEPHONE: 302-992-7342
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                                                                                                                                                                                                                                                                                                                                         412 amino acids
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INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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CURRENT APPLICATION DATA:
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                 APPLICATION NUMBER:
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Best Local Simi
Matches 84;
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                                                                                                                                                                                                                                                                                                                                         LENGTH:
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                                                                                                                                                                                                                                                                                                                                                             Gaps
  APPLICANT: PARIS, Jean-Marc
APPLICANT: DIRGC-ROSSET, Gilles
APPLICANT: DIRGC-ROSSET, Gilles
TITLE OF INVENTION: Streptogramins And Method For Preparing Same By
TITLE OF INVENTION: Matasynthesis
FILE REFERENCE: Streptogramin genes
CURRENT APPLICATION NUMBER: US/08/765,907A
SUFFERENCE PATENTING DATE: 1997-03-20
NUMBER OF SEQ ID NOS: 17
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 10
LENGTH: 399
                                                                                                                                                                                                                                                                                                                                                             41;
                                                                                                                                                                                                                                                                                                                   DB 4; Length 399;
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                                                                                                                                                                                                                                                                                                                   14.8%; Score 323.5; DB 4; 29.0%; Pred. No. 9.6e-26; ive 59; Mismatches 159;
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TITLE OF INVENTION: EXPRESSION OF P450SOY
TITLE OF INVENTION: AND FERREDOXIN-SCY IN
TITLE OF INVENTION: STREPTOMYCES
                                                                                                                                                                                                                                     TYPE: PRT ORGANISM: Streptomyces pristinaespiralis
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CORRESPONDENCE ADDRESS:
ADDRESSEE: E. I. DU PONT DE NEMOURS
ADDRESSEE: AND COMPANY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      COMPUTER: IBM PC Compatible
COPERATING SYSTEM: PC-LOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
SOFTWARE: Version #1.25
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Patent No. 5466590
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APPLICANT: SARIASLANI, SIMA
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Best Local Similarity 29.0°
Matches 166; Conservative
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MEDIUM TYPE: Floppy
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  STATE: DELAWARE COUNTRY: USA
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    389 KNLPL 393
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Sequence 71, Application US/09413814
Patent No. 6225064
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; ORGANISM: Sorangium cellulosum
US-09-413-814-71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: Baccoccard APPLICANT: Brandt, Petra APPLICANT: Cino, Paul M APPLICANT: Dougherty, Brian A and Trant: Goldberg, Steven L
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Mueller, Joachim
Reichenbach, Hans
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    SOFTWARE: Patentin Ver. 2.1 SEQ ID NO 71
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Query Match 12.7
Best Local Similarity 24.0
Matches 101; Conservative
                                                                    Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Goldberg, Stev APPLICANT: Hofle, Gerhard
                                                                                                                                    3 QEQANQSETKP-
                                                   Similarity
                                                                                                                                                                         62 HWIATRGQ-
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  1, 391
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US-09-413-814-71
US-09-335-409-8
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     22 IVANGQVNGRPITSDEAKRMCGLLLVGGLDTVVNFLSFSMEFLAKSPEHRQELIERPELI 281
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       225 ELIHRDHPDGPVDREQLVAFAVILLIAGHETTANMISLGTFTLLSHPEQLAALRAGGTST 284
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               340 FSRQKVSHTTFGHGSHLCLGQHLARREIIVTLKEWLTRIPDFSIA-PGAQIQEKSG-IVS 397
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      282 PAACEELLRRFSLVADG--RILISDYEFHGVQLKKGDQILLPQMLSGLDERKNACPMHVD
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APPLICANT: Ligon, James
APPLICANT: Molnat.
APPLICANT: Zirkle, Ross
APPLICANT: Zirkle, Ross
APPLICANT: Gorr, Devon
APPLICANT: Gorr, Devon
TITLE OF INVENTION: GENES FOR THE BIOSYNTHESIS OF EPOTHILONES
                                                                                                                                                                                                                                                                                                                                                                                                       Score 315; DB 5; Length 412;
Pred. No. 8.2e-25;
                                                                                                                                                                                                                                                                                                                                                                                                                                            Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                          Mismatches 163;
                  6.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    FILE REFERENCE: 4.30582A
CURRENT APPLICATION NUMBER: US/09/335,409
CURRENT FILING DATE: 1999-06-17
NUMBER OF SEQ ID NOS: 30
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 8
LENGTH: 419
 CCMPUTER: Macintosh
CPERATING SYSTEM: Macintosh System,
                                                                                                                                                                         REFERENCE/DOCKET NUMBER: CR-9000-A TELECOMMUNICATION INFORMATION:
                                                                  APPLICATION NUMBER: PCT/US92/10885
FILING DATE: 19921216
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       Sequence B, Application US/09335409
Patent No. 6121029
GENERAL INFORMATION:
                                 SOFTWARE: Microsoft Word, 4.0 CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                            26;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT ORGANISM: Sorangium cellulosum
                                                                                                                                                                                                                                                                                                                                                                                                      14.5%; 27.2%;
                                                                                                                                                                                                                                             INFORMATION FOR SEQ ID NO: 11: SEQUENCE CHARACTERISTICS:
                                                                                                                     ATTORNEY/AGENT INFORMATION:
NAME: GALLEGOS, R. THOMAS
REGISTRATION NUMBER: 32,6
                                                                                                                                                                                                            TELEPHONE: 302-892-7342
TELEFAX: 302-892-7949
                                                                                                                                                                                                                                                                                LENGTH: 412 amino acids
TYPE: AMINO ACID
STRANDEDNESS: unknown
                                                                                                                                                                                                                                                                                                                                                                                                                                          84; Conservative
                                                                                                                                                                                                                                                                                                                                   TOPOLOGY: unknown
MOLECULE TYPE: protein
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                                                                                    FILING DATE: 1.
                                                                                                                                                                                                                                                                                                                                                                        PCT-US92-10885-11
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                                                                                                                                                                                                                                                                                                                                             49 SWVLTRYHDVSAVFRDERFAVSREEWESSAEYSSAIP----ELSDMXKYGLFGLPPEDHA 104
                                                                                                                                                                                                                                                                                                                                                                                                            169
                                                                                                                                                                                                                                                                                                                                                                                                                                                                    105 RVRKLVNPSFTSRALDILRABIQRTVDQLLDARSGQEBFDVVRDYABGIPWRAISALLKV 164
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 165 PAE------CDEKFRREGSAT----ARALGVGLVPQVDEETKTLVASVTEGLALLHDV 212
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    208 IEQRRQKP-GTDAISIVANGQVNGRPITSDEAKRYCGLLLVGGLDTVVNFLSFSMEFLAK 266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SPEHRQELIERPELIPAACEELLRRFSLVADG--RILTSDYEFHGVQLKKGDQI--LLPQ 322
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     323 MISGIDERKUACPMEVDFSRQKVSHTTFGHGSHLCLGQHLARREIIVTLKEWLTRIPDFS 382
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                                                                                                                                                                                                                                                                                  LIREAYEDYRHFSSECPFIPREAGEAYDFIPTSMDPPEQR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        213 IDERRRNPLENDVLTWILGAEADGSRLSTKELVALVGAIIAAGTDTTTYLIAFAVLNLIR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  273 SPEALELVKAEPGIMRNALDBVLRFDNILKIGTVRFARQDLEYCGASIKKGEMVFLLIPS
                                                                                                                                                    6 QSNANLAPLPPHVPEHLVFDFDMYNPSNLSAGVQE----AWAVLQESNVPDLVWTRCNGG
                                                                                                                                                                                                                                                                                                                                                                                                            110 OFRALANOVVGMPVVDKLENRIGELACSLIESLRPQGQCNFTEDYAEPFFIRIFMLLAGL
                                                                                                                                                                                                                -----APDEKPFAP-----GYAEDPFPAIBRIRBA-TPIFYWD--EGR
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                          Length 419;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Gesellschaft fuer Biotechnologische Forschung mbH APPLICANT: Bristol-Myers Squibb, Co. APPLICANT: Beyer, Stefan APPLICANT: Beyer, Helmut
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Indels
12.7%; Score 277.5; DB 3; 24.0%; Pred. No. 8.4e-21; Nismatches 178;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    12.7%; Score 277.5; DB 3; 24.0%; Pred. No. 8.4e-21; ive 67; Mismatches 178;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         PEEDIPHLKYLTDQMTRPDGSMTFAEAKEALYDYLIP-
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EARLIER APPLICATION NUMBER: DE 198 46 493.2
EARLIER FILING DATE: 1998-10-09
NUMBER OF SEQ ID NOS: 107
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SPEHROELIERPELIPAACEELLRRPSLVADG--RILISDYEFHGVQLKKGDQI--LLPQ 322
                                                                                                                                                                                 -LIREAYEDYRHESSECPFIPREAGEAYDFIPTSMDPREGR 109
                                             49 SWVLTRYHDVSAVFRDERFAVSREEWESSAEYSSAIP----ELSDMKKYGLFGLPPEDHA 104
                                                                 110 OFRALANQVVGMPVVDKLENRIQELACSLIESLRPQGQCNFTEDYAEPFPIRIFMLLAGL 169
                                                                            170 PEEDIPHLKYL/TOQMTRPDGSMTFABAKEALYDYLIP--------- 207
                                                                                                               6 CSNANLAPLERHVPEHLVFDFDMYNPSNLSAGVQE----AMAVLQESNVPDLVMTRCNGG 61
           3 CEQANGSETXP----AFDFXPFAP-----GYAEDPFPAIERLREA-TPIFYWD--EGR 48
                                   HWIATRGQ-
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Search completed: April 6, 2004, 18:55:59 Job time : 15.9588 secs

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April 6, 2004, 18:53:57; Search time 34.974 Seconds (without alignments) 3108.883 Million cell updates/sec
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2177
1 TTSIIQSNANLAPLPPHYPE.....IVSGVQALPLVWDPATKAV 414
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1: /cgn2_6/ptodate/1/pubpaa/PCT_NEW_PUB.pep:*

2: /cgn2_6/ptodate/1/pubpaa/PCT_NEW_PUB.pep:*

3: /cgn2_6/ptodate/1/pubpaa/PCT_NEW_PUB.pep:*

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18: /cgn2_6/ptodate/1/pubpaa/USGO_PUBCCWB.pep:*

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18: /cgn2_6/ptodate/1/pubpaa/USGO_PUBCCWB.pep:*
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       1071772 segs, 262633353 residues
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Maximum Match 100%
Listing first 45 summaries
                                                                                                                            OM protein - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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Maximum DB seq length: 200000000
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                                                                                                                                                                                                                                                                                                                  Title:
Perfect
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| | Description | Sequence 13, Appl | Sequence 11, Appl | Sequence 2, Appli | Sequence 12, Appl | Sequence 37, Appl | Sequence 50, Appl | Sequence 40, Appl | Sequence 14997, A | Sequence 39, Appl | Sequence 39, Appl | Sequence 39, Appl | Sequence 39, Appl | Sequence 18, Appl | Sequence 13, Appl | Sequence 18, Appl | |
|---|--------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|--|
| | αI | US-10-453-I04-13 | US-10-453-104-11 | US-10-453-104-2 | US-10-453-104-12 | US-10-314-657-37 | US-10-214-446-50 | US-10-214-446-40 | US-10-156-761-14997 | US-09-861-289-39 | US-09-860-846-39 | US-09-988-384B-39 | US-09-836-821-39 | US-09-793-758-18 | US-10-201-365-13 | US-10-160-539-18 | |
| | 03 | 75 | 15 | 15 | 15 | 14 | 14 | 14 | 14 | σ | σ | 10 | 10 | 10 | 3.4 | 14 | |
| | Query Match Length DB | 414 | 414 | 414 | 414 | 399 | 404 | 404 | 416 | 416 | 416 | 416 | 416 | 416 | 416 | 416 | |
| ₩ | Query | 100.0 | 9.66 | 4.66 | 99.3 | 17.1 | 16.8 | 16.8 | 16.8 | 16.7 | 16.7 | 16.7 | 16.7 | 16.7 | 16.7 | 16.7 | |
| | Score | 2177 | 2169 | 2165 | 2162 | 372 | 366.5 | 365.5 | 365 | 363.5 | 363.5 | 363,5 | 363.5 | 363.5 | 363.5 | 363.5 | |
| | Result No. | - | 7 | m | 4 | 2 | 9 | 7 | & | 6 | 10 | 11 | 12 | 13 | 14 | 15 | |

| Seguence 39, Appl | Sequence 38, Appl | Sequence 9525, Ap | Sequence 20, Appl | | Seguence 8376, Ap | Seguence 559, App | Seguence 11073, A | Seguence 13776, A | Sequence 4, Appli | Sequence 32, Appl | Sequence 2, Appli | Sequence 8710, Ap | Sequence 9703, Ap | Sequence 6, Appli | Sequence 12, Appl | Seguence 16, Appl | Sequence 22, Appl | Sequence 14, Appl | Sequence 14659, A | Sequence 18, Appl | Sequence 36, Appl | Sequence 10431, A | Sequence 46, Appl | Sequence 22, Appl | Sequence 8, Appli | Seguence 6, Appli | Seguence 4117, Ap | Sequence 7959, Ap | Seguence 14, Appl |
|-------------------|-------------------|--------------------|-------------------|--------------------|--------------------|-------------------|---------------------|---------------------|-------------------|-------------------|-------------------|--------------------|--------------------|-------------------|-------------------|-------------------|-------------------|-------------------|---------------------|-------------------|-------------------|---------------------|-------------------|-------------------|-------------------|-------------------|--------------------|--------------------|-------------------|
| US-10-271-889-39 | US-10-214-446-38 | US-10-156-761-9525 | US-10-214-446-20 | US-10-156-761-9914 | US-10-156-761-8376 | US-10-389-647-559 | US-10-156-761-11073 | US-10-156-761-13776 | US-10-214-446-4 | US-10-214-446-32 | US-10-214-446-2 | US-10-156-761-8710 | US-10-156~761-9703 | US-10-201-213-6 | US-10-458-201-12 | US-10-214-446-16 | US-10-214-446-22 | US-10-214-446-14 | US-10-156-761-14659 | US-10-214-446-18 | US-10-214-446-36 | US-10-156-761-10431 | US-10-214-446-46 | US-10-145-415-22 | US-10-205-032-8 | US-10-145-425-6 | US-09-738-626-4117 | US-10-156-761-7959 | US-10-145-415-14 |
| 14 | 14 | 14 | 14 | 14 | 14 | 12 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 15 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | 14 | σ | 14 | 14 |
| 416 | 405 | 393 | 425 | 399 | 411 | 418 | 457 | 388 | 408 | 392 | 406 | 401 | 421 | 428 | 409 | 404 | 418 | 396 | 404 | 421 | 412 | 404 | 415 | 475 | 402 | 470 | 430 | 399 | 429 |
| 16.7 | 16.4 | 16.4 | 16.3 | 16.2 | 16.2 | 16.0 | 9,51 | 15.6 | 15.5 | 15.2 | 15.0 | 14.8 | 14.8 | 14.8 | 14.8 | 14.7 | 14.7 | 14.6 | 14.5 | 14.1 | 14.0 | 13.9 | 13.8 | 13.7 | 13.7 | 13.6 | 13 . EL | 13.6 | 13.6 |
| 363.5 | 357 | 356 | 354 | 352.5 | 352.5 | 348 | 343.5 | 339.5 | 337.5 | 330 | 326.5 | 323 | 323 | 323 | 322 | 319 | 319 | 317.5 | 315.5 | 307 | 304 | 303.5 | 300.5 | 298 | 297.5 | 297 | 296.5 | 296 | 295 |
| 16 | 17 | 80 | 4 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 3.5 | 9 | 7. | 38 | 9 | 40 | 41 | 42 | 43 | 44 | 45 |
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US-10.453-104-13
US-10.453-104-13
Sequence 13, Application US/10453164
Publication No. US2003207445A1
GENERAL INFORMATION:
APPLICANT: California Institute of Technology;
APPLICANT: Frances H. Arnold
APPLICANT: Frances H. Arnold
APPLICANT: Frances H. Arnold
APPLICANT: Frances H. Arnold
APPLICANT: Prances H. Arnold
APPLICANT: Prances H. Arnold
TILLE REFERENCE: 4058/1E827-US3
CURRENT APPLICATION NUMBER: US 3/10/453,104
CURRENT FILING DATE: 2000-09-16-02
PRIOR PILING DATE: 1999-02-09
PRIOR PLILNG DATE: 1999-02-09
PRIOR FILING DATE: 1998-07-28 6/094,403
PRIOR FILING DATE: 1998-07-28 6/096,206
PRIOR FILING DATE: 1998-07-28 6/106,840
PRIOR FILING DATE: 1999-05-21
PRIOR FILING DATE: 1999-05-21
PRIOR APPLICATION NUMBER: US 60/106,840
PRIOR FILING DATE: 1999-11-03
PRIOR FILING DATE: 1999-11-03
PRIOR APPLICATION NUMBER: US 60/106,834
PRIOR APPLICATION NUMBER: US 60/106,834
PRIOR APPLICATION NUMBER: US 60/106,834
PRIOR APPLICATION NUMBER: US 60/106,834
PRIOR APPLICATION NUMBER: US 60/106,934
PRIOR APPLICATION: MUTANT M7-8H
US-10-433-104-13
PRIOR APPLICATION NUMBER: US 60/106,934
PRIOR APPLICATION: MUTANT M7-8H
US-10-433-104-13
PRIOR APPLICATION NUMBER: US 60/106,934
PRIOR APPLICATION: MUTANT M7-8H
US-10-433-104-13
PRIOR APPLICATION OF US MISMATCHES 0; Indels 0; Gaps
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121 MPVVDKLENRIQELACSLISSLRPQGQCNFTEDYAEPFPIRIFMLLAGLPEEDIPHLKYL 180
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                                                                                                                                                                                                                                                                                                                                                         LTSDYEFHGVQLKKGDQILLPQMLSGLDERKNACPMHYDFSRQKVSHTTFGHGSHLCLGQ 360
61 GHWIATRGQLIREAYEDYRHFSSECPFIEREAGEAYDFIPTSMDPPEQRQFRALANQVVG 120
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                                                 MPVVJXLENRIQELACSLIESLRPQGQCNFTEDYAEPFPIRIFMLLAGLPEEDIPHLKYL
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APPLICANT: Frances H. Arnold
APPLICANT: Frances H. Arnold
APPLICANT: Frances H. Arnold
APPLICANT: Hyun Joo
TITLE OF INVENTION: Oxygenase Enzymes and Screening Method
FILE REFERENCE: 4058/1E827-US3
CURRENT APPLICATION NUMBER: US/12/453,104
CURRENT FILING DATE: 2003-06-02
PRIOR APPLICATION NUMBER: US 09/661,093
PRIOR APPLICATION NUMBER: US 09/246,451
PRIOR APPLICATION NUMBER: US 60/094,403
PRIOR FILING DATE: 1999-02-09
PRIOR FILING DATE: 1999-01-03
PRIOR APPLICATION NUMBER: US 60/066,840
PRIOR PRILING DATE: 1998-11-03
PRIOR FILING DATE: 1998-11-03
NUMBER OF SEQ ID NOS: 19
SOFTWARE: FASISEQ for Windows Version 3.0
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Pred. No. 1.6e-209;
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Sequence 2. Application US/10453104
Publication No. US20030207345A1
GENERAL INFORMATION:
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Best Local Similarity 99.55
Matches 412; Conservative
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US-10-453-104-2
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              TTETIOSNANLAPLPPHVPEHLVFDFDYYNPSNLSAGVOEAWAVLOESNVPDLVWTRCNG
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TITLE OF INVENTION: Oxgenase Enzymes and Screening Method
FILE REFERENCE: 4058,12827-US3
CURRENT APPLICATION NUMBER: US/10/453,104
CURRENT FILING DATE: 2003-66-02
PRIOR PRIOR PLLING DATE: 2000-09-13
PRIOR FILING DATE: 1999-02-09
PRIOR FILING DATE: 1999-02-09
PRIOR FILING DATE: 1999-02-09
PRIOR FILING DATE: 1999-07-09
PRIOR APPLICATION NUMBER: US 60/094,403
PRIOR FILING DATE: 1999-17-03
PRIOR FILING DATE: 1999-10-03
PRIOR FILING DATE: 1999-11-03
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    APPLICANT: California Institute of Technology; APPLICANT: Frances H. Arnold APPLICANT: Hyun Joo
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       r Sequence 11, Application US/10453104; Publication No. US20030207345A1; GENERAL INFORMATION:
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US-10-453-104-11
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Matches 413; Conservative
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US-10-453-104-11
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LENGTH: 414
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LISDYEFHGVQLKKGDQILLPQMLSGLDERKNACPMHVDFSRQKVSHTTFGHGSHLCLGQ
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                                                                                                                                                 HLARREIIVTLKEWLTRIPDFSIAPGAQIQHKSGIVSGVQALPLVWDPATTKAV
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28.1%; Pred. No. 1.8e-28;
ive 70; Mismatches 176; Indels
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GENERAL INTOKTALION:
APPLICANT: CHENG, Xi-Qiang
APPLICANT: TANG, Gong-Li
TITLE OF INVENTION: Discrete Acyltransferases Ass
TITLE OF INVENTION: Discrete Acyltransferases Ass
TITLE OF INVENTION: Synthases and Methods of Use
FILE REFERENCE: 054030-0021
CURRENT APPLICATION NUMBER: PCT/US02/08937
PRIOR APPLICATION NUMBER: PCT/US02/08937
PRIOR APPLICATION NUMBER: 2002-03-22
PRIOR FILING DATE: 2002-03-22
PRIOR FILING DATE: 2001-03-26
NUMBER OF SEQ ID NOS: 214
SOFTWARE: PATENTIN VERSION 3.2
SEQ ID NO 37,
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; ORGANISM: Streptomyces atroolivaceus
US-10-314-657-37
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       TDQMTRPDGSMTFASAKEALYDYLIPIIEQRRQKPGTDAISIVANGQVNGRPITSDEAKR 240
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                                                                                                                                                         241 MCGLLLVGGLOTVVNFLSFSMEFLAKSPEHRQELIERPERIPAACEELLRRFSLVADGRI
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                                                                                          MFGLLLVGGLDTVVNFLSFSMEFLAKSPEHROELIERPERIPAACEELLRRFSLVADGRI
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US=10-453-104-1.6

Sequence 12, Application US/10453154

Sequence 12, No. US20330207342A1

GENERAL INFORMATION:
APPLICANT: California Institute of Technology;
APPLICANT: Frances H. Arnold
APPLICANT: Hyun Joo
TITLE 3P INVENTION: Coxygenase Enzymes and Screening Method
FILE REFERENCE: 4058/JE827-US3
CURRENT PILING DATE: 2003-36-02
PRIOR APPLICATION NUMBER: US/10/453,104
CURRENT PILING DATE: 1999-02-09
PRIOR PILING DATE: 1999-02-09
PRIOR PILING DATE: 1999-02-09
PRIOR PILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/094,403
PRIOR PILING DATE: 1999-07-26
PRIOR FILING DATE: 1999-07-26
PRIOR FILING DATE: 1999-11-03
PRIOR FILING DATE: 1999-11-03
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99.5%; Pred. No. 3.2e-209;
iive 0; Mismatches 2;
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US-10-453-104-12
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Best Local Similarity 99.5'
Matches 412; Conservative
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APPLICANT: Hitchman, Tim
APPLICANT: Pujol, Catherine
APPLICANT: Richardson, Toby
APPLICANT: Short, Jay M.
ITILE OF INTENTION: P450 BNZYMES, NUCLEIC ACIDS ENCODING
TITLE OF INVENTION: THEM AND METHODS OF MAKING AND USING THEM
            APPLICANT: Hitchman, Tim
APPLICANT: Pujol, Catherine
APPLICANT: Richardson, Toby
APPLICANT: Short, Jay M.
TITLE OF INVENTION: P450 ENZYMES, NUCLEIC ACIDS ENCODING
TITLE OF INVENTION: THEM AND METHODS OF MAKING AND USING THEM
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SOFTWARE: FastSEQ for Windows Version 4.0
                                                                                                                                                                                                                                                   CURRENT APPLICATION NUMBER: US/10/214,446
CURRENT PELLIGATION NUMBER: US/10/214,446
PRIOR PELICATION NUMBER: US/03/09,497
PRIOR PELICATION NUMBER: US 60/309,497
PRIOR FILING DATE: 2001-08-03
NUMBER OF SEQ ID NOS: 59
NUMBER: PASESEC for Windows Version 4.0
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CURRENT APPLICATION NUMBER: US/1C/214,446
CURRENT FILING DATE: 2002-08-05
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PRIOR FILING DATE: 2001-08-03
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Burk, Mark J.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        APPLICANT: Weiner, David
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TYPE: PRT
ORGANISM: Bacterial
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ORGANISM: Bacterial
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                                                                                                                                                                                                                    139
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                                                                                                                                                                                                                                                                                                                                                                         133 DKMVATGAPVDLVEEFALPVPVGVICQLLGVPVBDRPRRAWSD-AALSTSSLTAEEFDA 191
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       ---RILISDYBFHGVQ 311
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   311 VRAGEPVLVAVGAANRDPARFDAPQELDLAREGNOHLGFGHGVHHCLGAPLARLELQEAL 370
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                                                                                                                                                     20 PFNEADGISLADAYBEAREQPGLLRVRMAYGEPAWLATR-----YADARLVLGDRRFS
                                                                                                                                                                                                                                                        73 RAEGARHDEPROSEGRRDSGILSMDPPDHTTRITALVAKAFTMHQVEKLRPAVRELADELI
                                                                                                        PSNLSAGVQEAKAVLQESNVPDLVWTRCNGGH--KTATRGQLIREAYEDYRHFSSECPFI
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                                                        31;
Length 404;
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                                                        Indels
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DB 14;
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  16.8%; Score 365.5; DB 14;
29.8%; Pred. No. 8.1e-28;
tive 58; Mismatches 189;
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APPLICANT: HORIKAWA, HIROSHI
APPLICANT: SHEHBA, TADAXOSHI
APPLICANT: SARAKI, YOSHIYUKI
APPLICANT: SARAKI, YOSHIYUKI
APPLICANT: HATTORI, MASAHIRA
TITLE OF INVENTION: NOVEL POLYNUCLECTIDES
FILE REPREMENCE: 249-262
CURRENT APPLICATION NUMBER: US/10/156,761
CURRENT FILING DATE: 2002-05-29
PRIOR FILING DATE: 2001-05-30
PRIOR FILING DATE: 2001-06-32
PRIOR FILING DATE: 2001-06-32
PRIOR FILING DATE: 2001-08-02
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                                           241 DRAELVSLATLLILIAGHETTANMISLGTFTLIRHPEQLAELRAEPGIMPAAVEELL-RFL 299
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                  174 IPHLKYTTEGWTRPDGSMTFAEAKEALYDYLIPIIEQRRQKPGTDAISIVANGQVNGRPI 233
                                                                                                234 TSDEAKRMFGLLLVGGLDTVVNFLSFSMEFLAKSPEHRQELIERPERIPAACEELLRRFS 293
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APPLICANT: Liu, H.
APPLICANT: Xue, Y.
APPLICANT: Xue, Y.
APPLICANT: Xue, Y.
TITLE OF INVENTION: DNA encoding methymycin and pikromycin
FILE REFERENCE: 600.438US1
CURRENT APPLICATION NUMBER: US/09/361,289
CURRENT PILING DATE: 2001-05-18
PRIOR APPLICATION NUMBER: 09/105,537
NUMBER OF SEQ ID NOS: 43
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 39
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Patent No. US20020110897A1
GENERAL INFORMATION:
APPLICANT: Sherman, D.H.
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Best Local Similarity 28.33
Matches 97, Conservative
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RESULT 10 US-09-860-846-39 ; Sequence 39, Application US/09860846

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APPLICANT: Liu, H.
APPLICANT: Liu, H.
APPLICANT: Zhao, I.
TITLE OF INVENTION: DNA encoding methymycin and pikromycin
TITLE OF INVENTION: DNA encoding methymycin and pikromycin
FILE REFRENCE: 600.536US1
CURRENT APPLICATION NUMBER: US/09/988,384B
CURRENT APPLICATION NUMBER: DCT/US99/14398
PRIOR APPLICATION NUMBER: PCT/US99/14398
PRIOR APPLICATION NUMBER: US 09/105,537
PRIOR PRILING DATE: 1998-06-26
NUMBER OF SEQ ID NOS: 53
SEQ ID NO 39
GENERAL INFORMATION:

APPLICANT: Sherman, D.H.
APPLICANT: Sherman, D.H.
APPLICANT: Xue, Y.
APPLICANT: Late, Y.
TITLE OF INVENTION:
FILE REFERENCE: 60.438US1
CURRENT FILING DATE: 2001-05-18
PRIOR APPLICATION NUMBER: 09/105,537
PRIOR FILING DATE: 1998-06-26
NUMBER OF FILING DATE: 1998-06-26
NUMBER OF SECRET OF NINGONE VERSION 3.0
SOFTWARE: FastsEQ ID NOS: 43
TANNOM: 4.5
SEQ ID NO 39
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28.3%; Pred. No. 1.3e-27;
tive 62; Mismatches 163;
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Best Local Similarity 28...
Best Local Similarity 28...
The 97; Conservative
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US-09-988-384B-39
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303 DLDGTVIPAGDIVLVVLADAHRTPERFPDFHRFDIRRDTAGHLAFGHGIHFCIGAPLARL 362
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APPLICANT: TANG, Li
TITLE OF INVENTION: RECOMBINANT NARBONOLIDE POLYKETIDE SYNTHASE
FILE REFERENCE: 30562202121
CURRENT APPLICATION NUMBER: US/09/793,708
CURRENT APPLICATION NUMBER: US 09/657,440
PRIOR PILLING DATE: 2000-09-07
PRIOR PLILING DATE: 1999-05-27
PRIOR PLILING DATE: 1999-06-27
PRIOR PLILING DATE: 1999-06-27
PRIOR PLILING DATE: 1999-06-27
PRIOR APPLICATION NUMBER: US 09/141,908
PRIOR PLILING DATE: 1999-06-06
PRIOR PLILING DATE: 1999-05-06
PRIOR APPLICATION NUMBER: US 08/846,247
PRIOR APPLICATION NUMBER: US 08/846,247
PRIOR APPLICATION NUMBER: US 06/134,990
PRIOR PLILING DATE: 1999-05-20
NUMBER OF SEQ ID NOSE: 38
SOFTWARE: PARENTENT OF NOSE: 38
SOFTWARE: PARENTENT OF NOSE: 38
SOFTWARE: PARENTENT OF NOSE: 38
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28.3%; Pred. No. 1.3e-27;
ive 62; Mismatches 163;
                                                                                                                                                                                                                                         Sequence 18, Application US/09793708
Publication No. US20030104597A1
GENERAL INFORMATION:
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BETLACE, Melanie C.
BETLACE, Mary C.
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US-10-201-365-13
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              Length 416;
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APPLICANT: Sherman, D.H.
APPLICANT: Liu, H.
APPLICANT: Xue, Y.
APPLICANT: Zhao, L.
TITLE OF INVENTION: DNA encoding methymycin and pikromycin FILE REFERENCE: 600.438US1
CURRENT APPLICATION NUMBER: US/09/836,821
CURRENT FILING DATE: 2001-04-17
PRIOR FILING DATE: 1998-06-26
RRIOR FILING DATE: 1998-06-26
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                 DB 10;
            Score 363.5; DB 10;
Pred. No. 1.3e-27;
62; Mismatches 163;
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28.3%; Pred. No. 1.3e-27;
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SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 39
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US-09-836-821-39
                 16.7%;
28.3%;
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            Query Match 16.7
Sest Local Similarity 28.3
Matches 97; Conservative
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Gaps

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Search completed: April Job time: 35,974 secs
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Sequence 13, Application US/10201365
Publication No US20030148469A1
GENERAL TREMATION:
APPLICANT: BETLACH, Mary
APPLICANT: BETLACH, Mary
APPLICANT: BETLACH, Mary
APPLICANT: BETLACH, Mary
APPLICANT: TANG, Li
APPLICANT: TANG, Li
APPLICANT: TANG, Li
APPLICANT: TANG, Li
APPLICANT: TANG, Li
APPLICANT: TANG, Li
APPLICANT: US COMBINATORIAL POLYKETIDE LIBRARIES PRODUCED USING A MODULAR
FILLS REFERENCE: 30062202103
FILLS REFERENCE: 30062202103
CURRENT APPLICATION NUMBER: US/10/201,365
CURRENT FILING DATE: 1998-63-28
PRIOR FILING DATE: 1998-63-28
PRIOR FILING DATE: 1998-63-06
NUMBER OF SEQ ID NOS: 32
SOFTWARE: PATCHIN VET. 2.0
SEQ ID NO 13
LENGTH: 416
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APPLICANT: BETLACH, Melanie C.
APPLICANT: BETLACH, Mary C.
APPLICANT: BETLACH, Mary C.
APPLICANT: BETLACH, Mary C.
APPLICANT: TANG, Li
TITLE OF INVENTION: RECOMBINANT NARBONOLIDE POLYETIDE SYNTHASE
FILE REFERRICE: 300622002120
CURRENT APPLICATION NUMBER: US/10/160,539
CURRENT FILING DATE: 2002-05-29
PRIOR FILING DATE: 2000-09-07
PRIOR FILING DATE: 1999-05-27
PRIOR APPLICATION NUMBER: US/320,878
PRIOR FLLING DATE: 1999-05-27
PRIOR APPLICATION NUMBER: CIP OF 09/141,908
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16.7%; Score 363.5; DB 14; Length 416;
Best Local Similarity 28.3%; Pred. No. 1.3e-27;
Matches 97; Conservative 62; Mismatches 163; Indels 21;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 ORGANISM: Streptomyces venezuelae
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248 TVNLIANGMYALLSHPDQLAALRADWTLLDGAVEEMLR-----YEGPVESATYRFPVRPV 302
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28.3%; Pred. No. 1.3e-27;
tive 62; Mismatches 163;
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                                                                                                                                         TYPE: PRT ORGANISM: Streptomyces venezuelae
PRIOR FILING DATE: 1998-08-28
NUMBER OF SEQ ID NOS: 34
SOFTWARE: Patentin Ver. 2.0
SEQ ID NO 18
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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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.! /cgn2_6/ptodata/2/iaa/6A_COMB.pep:*
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.! /cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:* Post-processing: Minimum Match 1008
Maximum Match 1008
Listing first 45 summaries Database

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

Sequence 18, Appl Sequence 13, Appl Sequence 13, Appl Sequence 18, Appl Patent No. 5212296 Sequence 10, Appl Sequence 12, Appl Sequence 12, Appl Sequence 11, Appl Sequence 11, Appl Sequence 8, Appli Sequence 8, Appli Sequence 8, Appli Sequence 8, Appli Sequence 8, Appli Sequence 12, Appli Sequence 8, Appli Sequence 8, Appli Sequence 129, Appli Sequence 129, Appli Sequence 129, Appli Sequence 129, Appli Sequence 129, Appli Sequence 20, Appli Sequence 20, Appli Sequence 20, Appli Sequence 20, Appli Sequence 20, Appli Sequence 20, Appli Sequence 5, Appli Sequence 5, Appli Sequence 5, Appli Sequence 5, Appli Sequence 5, Appli Sequence 5, Appli Sequence 5, Appli Sequence 5, Appli Sequence 5, Appli Sequence 5, Appli Sequence 5, Appli Description US-09-385-028-12 US-09-385-028-12 US-09-385-028-12 US-09-385-040-12 US-09-355-10885-11 US-09-355-409-8 US-09-568-409-8 US-09-568-409-8 US-09-568-408-8 US-09-568-408-8 US-09-568-408-8 US-09-568-408-8 US-09-568-408-8 US-09-568-412-8 US-09-568-412-8 US-09-568-412-8 US-09-568-412-8 US-09-568-412-8 US-09-568-412-8 US-09-68-989-8 US-09-68-989-8 US-09-09-98-8 US-09-09-98-8 US-09-09-98-8 US-09-09-98-8 US-09-105-537-39 US-09-141-908-13 US-09-657-440-18 US-09-252-991A-17836 5212296-9 5212296-6 US-08-765-907A-10 SUMMARIES Query Match Length DB Score 363.5 363.5 363.5 363.5 347 340 328 328 Result No.

76 EDYRHESSECPFIPREAGEAYDFIPTSMDPPEQRCFRALANQVVGMPVVDKLENRIQELA 135

Gaps

21;

Length 416;

16.7%; Score 363.5; DB 3; 28.3%; Pred. No. 5.5e-29; tive 62; Mismatches 163;

97; Conservative

Best_Local Similarity Matches 97; Conservi

Query Match

TYPE: PRT CRGANISM: Streptomyces venezuelae US-09-320-878-18

SEQ ID NO 18

136 CSLIESL--RPQGQCNFTEDYAEPFPIRIFMLLAGLPEEDIPHLKYLTDQMTRPDGSMTF 193

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128 DGLVDAMLAAPDGRADLMESLAWPLPITVISELLGVPEPDRAAFRVWTDAFVFPDDPAQA 187

188 QTAWAEMSGYLSRIIDSKRGQDGEDILSALVRISDEDGSRLISEELLGWAHILLVAGHET 247

194 AEAKEALYDYLIPIIEQRRQKPGTDAIS-IVANGQVNGRPIISDEAKRMFGLILVGGLDI

| Sequence 8, Appli Sequence 9, Appli Sequence 2, Appli Sequence 2, Appli Sequence 7, Appli Sequence 7, Appli Sequence 7, Appli Sequence 22, Appli Sequence 22, Appli Sequence 24, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 2, Appli Sequence 3, Appli Sequence 3, Appli Sequence 3, Appli Sequence 3, Appli Sequence 3, Appli | E SYNTHASE |
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| US-08-653-650A-9 US-09-096-982-9 US-08-63-650A-9 US-08-63-650A-9 US-08-18-2 US-08-18-2 US-08-18-2 US-09-18-2 US-09-141-908-7 US-09-141-908-7 US-09-141-908-7 US-09-141-908-7 US-09-144-3-7 US-09-105-537-4 US-09-105-537-4 US-09-116-42-2 US-09-116-42-2 US-09-116-42-3 US-09-211-118-3 US-08-201-118-3 US-08-201-118-3 | ALIGNMENTS ULT 1 09-320-678-18 equence 18, Application US/09320878A ateair No. 611760: APPLICANT: ASHLEY, Gary APPLICANT: BETLACH, Melanie C. APPLICANT: BETLACH, Melanie C. APPLICANT: BETLACH, Melanie C. APPLICANT: MCDANIEL, Robert APPLICANT: MCDANIEL, Robert APPLICANT: MCDANIEL, ROBERT APPLICANT: MCDANIEL, ROBERT APPLICANT: MCDANIEL, ROBERT APPLICANT: NOWERR: 05/09/320,878A CURRENT APPLICATION NUMBER: 08/09/320,878A EARLIER PILING DATE: 1999-05-27 EARLIER FILING DATE: 1999-06-06 EARLIER FILING DATE: 1999-06-06 EARLIER FILING DATE: 1999-02-08 EARLIER FILING DATE: 1999-02-08 EARLIER FILING DATE: 1999-02-08 EARLIER FILING DATE: 1999-02-08 EARLIER FILING DATE: 1999-02-08 EARLIER FILING DATE: 1999-02-08 EARLIER FILING DATE: 1999-02-08 EARLIER FILING DATE: 1999-02-08 EARLIER FILING DATE: 1999-02-08 EARLIER FILING DATE: 1999-02-08 EARLIER FILING DATE: 1999-02-08 EARLIER FILING DATE: 1999-02-08 EARLIER FILING DATE: 1999-02-08 EARLIER FILING DATE: 1999-02-08 EARLIER APPLICATION NUMBER: 60/100, 880 EARLIER APPLICATION NUM |
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| 161 158 158 158 158 123 123 123 123 123 123 123 123 123 123 | SULT 1 Sequence 18, Applic Becarin to 6117659 BEREAL INFORMATION APPLICANT: BETLACH APPLICANT: BETLACH APPLICANT: BETLACH APPLICANT: TANG, INFORMATION TILLE OF INVENTION FILE REFERENCE: 30 CURRENT FILING DAT EARLIER APPLICATION EARLIER PILING DAT EARLIER PILING DAT EARLIER PILING DAT EARLIER PILING DAT EARLIER PILING DAT EARLIER PILING DAT EARLIER PILING DAT EARLIER PILING DAT EARLIER PILING DAT EARLIER PILING DAT EARLIER PELING DAT EARLIER PELING DAT EARLIER PELING DAT EARLIER PELICATION EARLIER PELING DAT EARLIE |
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RESULT 4
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                         248 TVNLIANGMYALLSHPDQLAALRADMTLLDGAVEEMLR-----YEGPVESATYRFPVEPV 302
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VVNFLSFSMEFLAKSPEHRQELIERPERIPAACEELLRRFSLVADGRILTSDYBF---- 307
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Sequence 39, Application US/09105537A
Sequence 39, Application US/09105537A
Sequence 39, Application US/09105537A
Setent No. 6265202
Setent No. 6265202
Setent No. 6265202
Septicant: Liu, H.
APPLICANT: Liu, H.
APPLICANT: Liu, H.
SETENCONT: Clao, H.
TILLE OF INVENTION: DNA encoding methymycin and pikromycin
TILLE OF INVENTION: DNA encoding methymycin and pikromycin
FILE REFERRACE: 600-438US1
CURRENT FELLICATICATICA NUMBER: US/09/105,537A
CURRENT FILING DAILE: 1998-06-26
NUMBER OF SEQ ID NGS: 43
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 39
LENGTH: 416
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; Patent No. 6503741
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; GENERAL INFORMATION:
APPLICANT: ASHLEY, Gary
APPLICANT: BETLACE, Melanie C.
APPLICANT: BETLACE, Mary
APPLICANT: MCDANIEL, Robert
; APPLICANT: TANG, Li
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US-09-141-908-13
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TITLE OF INVENTION: Combinatorial Polyketide Libraries Produced Using TITLE OF INVENTION: Modular PKS Gene Cluster as Scaffold
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APPLICANT: BETLACH, Melanie C.
APPLICANT: BETLACH, Mary C.
APPLICANT: MCBAUEL, Robert
APPLICANT: TANGA Li
TITLE OF INVENTION: RECOMBINANT NARBONOLIDE POLYKETIDE SYNTHASE
FILE REFERENCE: 300622002120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          Length 416;
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                                                       FILE REFERENCE: 300622002100
CURRENT APPLICATION NUMBER: US/09/141,908
CURRENT FILING DATE: 1998-08-28
EARLIER APPLICATION NUMBER: CIP OF 09/073,538
EARLIER FILING DATE: 1998-05-06
EARLIER FILING DATE: 1998-05-06
EARLIER FILING DATE: 1997-04-30
EARLIER FILING DATE: 1998-03-05
EARLIER FILING DATE: 1998-03-05
EARLIER FILING DATE: 1998-03-05
EARLIER FILING DATE: 1998-05-28
NUMBER OF SEQ ID NOS: 31
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CURRENT FILING DATE: 2006-09-07
PRIOR APPLICATION NUMBER: 09/320,878
PRIOR PILIOG DATE: 1999-05-27
PRIOR APPLICATION NUMBER: CIP 0F 09/141,908
PRIOR FILING DATE: 1999-08-28
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          ORGANISM: Streptomyces venezuelae US-09-141-908-13
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SOFTWARE: Patentin Ver. 2.0
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           97; Conservative
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LENGTH: 416
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PHL----KYLIDQMIRPDGSMTFABAKEALYDYLIPIIBQRRQKPGTDAIS-IVANGQVN 229
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                                                                                        340 FSRQKVSHTTFGHGSHLCLGQHLARREIIVTLKEWLTRIPDFSIA-PGAQIQHKSGIVSG 398
         282 PAACEELLRRFSLVADG--RILISDYEFHGVQLKKGDQILLPQMLSGLDERKNACPMHVD 339
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         230 GRPITSDEAKRMFGLLLVGGLDTVVNFLSFSMEFLAKSPEHRQELIERPERIPAACEELL
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                                                  289 PNAMEELVRHDSPVRASMLRFTVEDVELDGVTIPAGEYILVSNLTANHDAERFDDPDRLD
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  30;
                                                                                                                        Length 403;
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                                                                                                                                                                                                                                                                                                                                                                                                       TITLE OF INVENTION: EXPRESSION OF HERBICIDE METABOLIZING
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               PATENT NO. 5212296;
APPLICANT: DEAN, CAROLINE; HARDER, PATRICIA A.; LETO,
J.; O'KEEFE, DANIEL P.; OMER, CHARLES A.; ROMESSER, JAMES.
                                                                                                                                                                                                                                                                                                                                                           APPLICANT: DEAN, CAROLINE; HARDER, PATRICIA A.; LETO, J.; O'KEEFE, DANIEL P.; OMER, CHARLES A.; ROMESSER, JAMES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     15.6%; Score 340; DB 6; Lv
28.9%; Pred. No. 1.4e-26;
iive 63; Mismatches 165;
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APPLICATION NUMBER: US/07/569,781
FILING DATE: 23-AUG-1990
PRIOR APPLICATION DATA:
APPLICATION NUMBER: 464,499
FILING DATE: 12-JAN-1990
APPLICATION NUMBER: 405,605
FILING DATE: 11-SEP-1989
                                                                                                                                                                                   399 VOALPLVWDPAT 410
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105; Conservative
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LENGTH: 403
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Best Local
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Matches
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5212296-9
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TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS.
TITLE OF INVENTION: AERGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR FILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-02-18
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 17336
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               165 LLAGLPEEDIPHLKYLID --- OMTRPDGSMTFAEAKEALYDYLIPIIEORROKPGTDAIS
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                                                                                                                                                                                                                                                                                                                                                       QTAMAEMSGYLSKLIDSKRGQDGEDJLSALVRTSDEDGSRITSBEJJGMAHILLVAGHET
                                                                                                                                            76 EDYRHFSSECPFIPREAGEAYDFIPTSMDPPEQRQFRALANQVVGMPVVDKLENRIQELA
                                                                                                                                                                            136 CSLIESL--RPQGQCNFTEDYAEPPIRIFMLLAGIPEEDIPHLKYLTDQMTRPDGSMTF
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                                                                                                                                                                                                                                                                                                                       194 AEAKEALYDYLIPIIEQRRQKPGTDAIS-IVANGQVNGRPITSDEAKRMFGLLLVGGLDT
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                                                             Length 416;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | : :: | | | | : :: | | | EARIAVRALLERCPDLALDVSPGBLVWYPNPMIRGLKALPIRM 405
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   366 ELEVILKEWLIRIPDPS--IMPGAQIQHKSGIVSGVQALPLVW 406
                                                                                                      62; Mismatches 163;
                                                             DB 4;
                                                           16.7%; Score 363.5; DB 4
28.3%; Pred. No. 5.5e-29;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         63 WIATRGOLIREAYEDYRHFSSECPFIPREA
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Patent No. 6551795
ORGANISM: Streptomyces venezuelae
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ORGANISM: Pseudomonas aeruginosa
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                                                                                                        97; Conservative
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Best Local Similarity
Matches 95; Conserv
                                                                               Best Local Similarity
Matches 97; Conserv
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US-09-252-991A-17836
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      ; ORGANISM: Str
US-09-657-440-18
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US-09-385-028-12
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APPLICANT: DUTRUC-ROSSET, Gilles
TITLE OF INVENTION: Strept-ogramins And Method For Preparing Same By
TITLE OF INVENTION: Mutasynthesis
                                                                                                                                                                                                                                                                                                               24;
                                                                                                                                                                                                                                                                                                                                                  31 PSNLSAGVQ--EAWAVLQESNVPDLVWTRCNGGH-WIATRGCLIREAYEDYR-
                                                                                                                                                                                                                                                                            DB 6; Length 406;
2.5e-25;
                                                                                                                                                                                                                                                                                                               Indels
           TITLE OF INVENTION: EXPRESSION OF HERBICIDE METABOLIZING
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26.3%; Pred. No. 2.5e-25;
cive 74; Mismatches 193;
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CURRENT APPLICATION NUMBER: US/08/765,907A
CURRENT FILING DATE: 1997-03-20
NUMBER OF SEQ ID NOS: 17
SOFTWARE: PATENTIN VET: 2.0
SEQ ID NO 10
LENGTH: 399
                               CUTCCHROMES

NUCHER OF SEQUENCES: 19
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/07/569,781
FILING DATE: 23-AUG-1990
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Patent No. 6352839
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BLANCHE, Francis
COUZET, Joel
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DEBUSSCHE, Laurent
FAMECHON, Alain
                                                                                                                  PRIOR APPLICATION DATA:
APPLICATION NUMBER: 464,499
FILING DATE: 12-JAN-1990
APPLICATION NUMBER: 405,505
FILING DATE: 11-SEP-1989
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Best Local Similarity 26.3
Matches 104; Conservative
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JAMES M.
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US-08-765-907A-10
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TEPPERMAN,
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                                                                                                                                                                                                                                                           122 PVVDKLENRIQELACSLIESLRPQGQC-NFTEDYAEPFPIRIFMLLAGLPEEDIPHLKYL 180
                                                                                                                                                                                                                                                                                      96 RTVADLEPRVTELAGQLIDAV--DGDTFDLVADRAYPLPVIVIAELLGVPPADRTLFRSW 153
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                                                                                                                                                                                          -PDGSMTFAEAKEALYDYLIPIIEQRRQKPGTDAISIVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                   225 NGOVNGRPITSDEAKRMFGLLLVGGLDTVVNFLSFSMEFLAKSPEHROELIERPER--IP
                                                                                                                  Gaps
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                                                                                                                41:
                                                                   Length 399;
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The Jenifer Buliding, 400 Seventh Street, N.W.
                                                                                                                Indels
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/NG-DOS
SOFTWARE: Patentin Release #1.3, Version #1.30 (EPO)
                                                                   14.9%; Score 324.5; DB 4; 29.0%; Pred. No. 5.7e-25; iive 59; Mismatches 159;
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REFERENCE/DOCKET NUMBER: 1418/P57452US2
TELECOMMUNICATION INFORMATION:
ORGANISM: Streptomyces pristinaespiralis
US-08-765-907A-10
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: Acid Biosynthesis
NUMBER OF SEQUENCES: 25
CAPPERSPONDENCE ADDRESS:
ADDRESSEE: JACOBSON, PRICE, HOLMAN
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     Sequence 12, Application US/09385028
Patent No. 6232106
GENERAL INFORMATION.
APPLICANT: Susan E. Jensen
APPLICANT: Kwamena A Aidoo
APPLICANT: Ashish S. Paradkar
TITLE OF INVENTION: DNA Sequence En
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APPLICATION NUMBER: US/09/385,026
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ATTORNEY/AGENT INFORMATION:
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                                                                                                                     Conservative
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PRIOR APPLICATION DATA:
APPLICATION NUMBER: U
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MEDIUM TYPE: Floppy
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U.S.A.
                                                                     Query Match
Best Local Similarity
Matches 106; Conserv
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: 409 amino acids
amino acid
                                                                                                                                     NAME: D. Douglas Price
REGISTRATION NUMBER: 2-
                                                                                                                                                                                                                                                                                                                                                                                                                                                       Conservative
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MOLECULE TYPE: protein
                APPLICATION NUMBER: FILING DATE:
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Best Local Similarity
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Matches
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                                                                                                                                                                                                                                                                                 16 PHVPEHLVFDFDMYNPSNLSAGVQEAWAVLQESNVPDLVWTRCNGGH-WIATRGQLIREA
                                                                                                                                                                                                                                                                                                      14 PAYÉWHRVCZVD---ÈPPQLAGIRSQKAASRVT----LW---BGSQVWLVTSHAGARAV
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                                                                                                                                                                                                                                              54; Gaps
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                                                                                                                                                                                                            Length 409;
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ADDRESSEE: JACCBSON, PRICE, HOLMAN & STERN, PPLC
STREET: The Jenifer Buliding, 400 Seventh Street, N.W.
CITY: Washington
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PatentIn Release #1.0, Version #1.30 (EPO)
                                                                                                                                                                                                            Score 322; DB 3;
Pred, No. 1.1e-24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  TITLE OF INVENTION: Acid Biosynthesis NUMBER OF SEQUENCES: 25
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CPERATING SYSTEM: PC-DOS/MS-DOS
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APPLICANT: Kwamena A Aidoo
APPLICANT: Ashish S. Paradkar
TITLE OF INVENTION: DNA Sequer
tent No. 6514735
                                                                                                                                                                                                      14.8%;
28.7%;
TELEPHONE: (202 638-6666
TELEPAX: (202) 39305350
TELEX: RCA 248593 IDEA UR
INFORMATION FOR SEQ ID NO: 12
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                                                                                        409 amino acids
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                                                                    SEQUENCE CHARACTERISTICS:
                                                                                                                          single
                                                                                                                                                         MOLECULE TYPE: protein
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                                                                                                       amino acid
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                                                                                                                       STRANDEDNESS:
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CCUNTRY:
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US-09-726-614-12
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352 EGMHQCLGQWLARVELEEILAAVLRWM---PGARLAVPFEELDFRHEVSSYGLGALPVTW 408
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APPLICANT: Aidoo, Kwamena A
APPLICANT: Aidoo, Kwamena A
APPLICANT: Paradkar, Ashish S
TITLE OF INVENTION: DNA SEQUENCE ENCODING ENZYMES OF CLAVULANIC ACID
TITLE OF INVENTION: BIOSYNTHESIS
FILE REFERENCE: 09/385, 040
CURRENT APPLICATION NUMBER: US/09/385, 040
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Pred. No. 1.1e-24;
60; Mismatches 186; Indels
                                                    CLASSIFICATION:
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/790,462
FILING DATE: 29-JAN-1997
ATTORNEY/AGENT INFORMATION:
US/09/726,614
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                                                                                                                                                                                                                             REGISTRATION NUMBER: 24,514
REPREENCE DOCKET NUMBER: 1418,
TELECOMUNICATION INFORMATION:
TELEPHONE: (202 39959565
TELEFAX: (202) 3995956
TELEX: RCA 248591 IDEA UR
INFORMATION FOR SEQ ID NO: 12:
SEQUENCE CHARACTERISTICS:
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28.7%;
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285 AVVVEELL-RFLSIAEGLQRLATEDMEVDGATIRKGEGVVFSTSLINRDADVFPRAETLD 343
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TITLE OF INVENTION: CONSTITUTIVE
TITLE OF INVENTION: EXPRESSION OF P450SOY
TITLE OF INVENTION: AND FERREDOXIN-SOY IN
TITLE OF INVENTION: STREPTOMYCES
NUMBER OF SEQUENCES: 11
CORRESPONDENCE ADDRESS:
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ADDRESSEE: AND COMPANY
                                                           CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/07/807,001
                     US/08/102,863
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Diskette, 3.50 inch,
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                                                                                                                                                                                                      CR-9000
                                                                                                                                                                                 32,692
                                                                                                                                                                                                                   TELECOMMUNICATION INFORMATION:
TELEPHONE: 302-892-7342
TELEFAX: 302-892-7949
                                                                                                                                                                                                                                                                                   11:
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                                                                                                                                       ATTORNEY/AGENT INFORMATION:
NAME: GALLEGOS, R. THOMAS
REGISTRATION NUMBER: 32,66
REFERENCE/DOCKET NUMBER:
                                                                                                                                                                                                                                                                                                                           412 amino acids
                                                                                                                                                                                                                                                               TELEFAX: 302-892-7949
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
  DATA:
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                                                                                                                                                                                                                                                                                                                                                                     unknown
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MEDIUM TYPE: Diskett
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              APPLICATION NUMBER:
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                    unknown
      CURRENT APPLICATION
                                                                                                                                                                                                                                                                                                                                                TYPE: amino acid
STRANDEDNESS: unl
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nes 84; Conserv
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                                                                                                                        FILING DATE:
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                                                                                                                                                                                                                                                                                                                           LENGTH:
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            234 ISDEAKRMFGLLLVGGLDTVVWFLSFSMEFLAKSPEHRQELIERPERIPAACEELLRRFS 293
                                                                                                                                                                                                                                                                                                                                                                                                                              63 LGDRRFTAVTSAPGFFMLTRTSQLVRANPESASFI--RMDDFQHSRLRSMLTRDFLARAA 120
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                                                                                                                                                                                                                                                                                                                                                14 PAYPMHRVCPVD---PPPQLAGLRSQKAASRVT----LW---DGSQVWLVTSHAGARAV 62
                                                                                                                                                                                                                                                                                                          16 PHVPEHLVFDFDMYNPSNLSAGVQEAWAVLQESNVPDLVWTRCNGGH-WIATRGQLIREA
                                                                                                                                                                                                                                                                    54;
                                                                                                                                                                                                                            14.8%; Score 322; DB 4; Length 409; 28.7%; Pred. No. 1.1e-24; Live 60; Mismatches 186; Indels
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      EXPRESSION OF P450SOY AND PERREDOXIN-SOY IN STREPTOMYCES
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       CORRESPONDENCE ADDRESS:
ADDRESSEE: E. I. DU PONT DE NEMOURS
CURRENT FILING DATE: 1999-08-30
PRIOR APPLICATION NUMBER: US 08/790,462
PRIOR FILING DATE: 1997-01-29
NUMBER OF SEQ ID NOS: 25
SOFTWARE: PatentIn Ver. 2.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 Sequence 11, Application US/08102863
Patent No. 5466590
GENERAL INFORMATION:
TITLE OF INVENTION: CONSTITUTURE
TITLE OF INVENTION: EXPRESSION OF TITLE OF INVENTION: AND FERREDOXIN: TITLE OF INVENTION: STEPPOMYCES
NUMBER OF SEQUENCES: 12
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         COMPUTER: 1EM PC Compatible
DERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0,
SOFTWARE: Version #1.25
                                                                                                                                                                ORGANISM: Streptomyces clavuligerus
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                                                                                                     SEQ ID NO 12
LENGIH: 409
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Best Local S:
Matches 121
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49 SWYLTRYHDVSAVFRDERFAVSREBWSSSARYSSAIP----ELSDMKKYGLFGLPPEDHA 104
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                                                                                                                                                                                                                                                                                                         110 QERALANOVVGMPVVDKLENRIQELACSLIESLRPQGOCNFTEDYAEPFPIRIFMLLAGL 169
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     MLSGLDERKNACPMEVDFSROKVSHTTFGHGSHLCLGQHLARREIIVTLKEWLTRIPDFS 382
                                                                                                                                                                                                                                                                                                                                                    RVRKLVNPSFISRAIDLLRAEIQRTVDQLLDARSGQBEFDVVRDYAEGIPMRAISALLKV 164
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                                                                                                                                                                      ----AFDFKPPAP-----GYAEDPPPAIERLREA-TPIFYWD--EGR
                                                                                                                                                                                                                   -LIREAYEDYRHFSSECPFIPREAGEAYDFIPTSMD2PEOR
                                                                                                                            6 OSNANLAPLPPHVPEHLVFDFDMYNPSNLSAGVQE----AWAVLQESNVPDLVWTRCNGG
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                                       Length 419;
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bb. Co.
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                                                                                  Indels
                                     12.5%; Score 271.5; DB 3; 23.8%; Pred. No. 1.9e-19; ive 67; Mismatches 179;
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APPLICANT: Moller, Joachim
APPLICANT: Reichenbach, Hans
TITLE OF INVENTION: DNA sequences for enzymatic sy
TITLE OF INVENTION: hereropolyketide compounds
FILE REFERENCE: PCT/US 99/2355
CURRENT APPLICATION NUMBER: US/09/413,814
CURRENT FILING DATE: 1999-10-07
EARLIER APPLICATION NUMBER: DE 198 46 493.2
BARLIER FILING DATE: 1998-10-07
SARLIER FILING DATE: 1998-10-07
SUMPRER OF SEQ ID NOS: 107
SOFTWARE: PATENTIN VOICE: 107
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Patent No. 6225064
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  APPLICANT: Beyer, Stefan
APPLICANT: Bloccker, Helmut
APPLICANT: Brandt, Petra
APPLICANT: Cino, Paul M
APPLICANT: Goldberg, Brian A
APPLICANT: Goldberg, Steven I
AFPLICANT: Hofle, Gerhard
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   Sorangium cellulosum
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Best Local Similarity 23.8
Matches 100; Conservative
                                                                                      Matches 100; Conservative
                                                                                                                                                                        3 ÓEQÁNOSETKP-
                                                                                                                                                                                                                       62 HWIATRGQ---
                                                               Similarity
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JS-09-335-409-8
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                                          Query Match
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          103 MOPPEQROFRALANGVVGMPVVDKLENRIQELACSLIESLRPQG-QCNFTEDYAEPFPIR 161
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   162 IFMLLAGLPEEDIPHLKYLTDQMTRPDGSYTFAEAKEALYDYLIPIIEQRRQKPGTDAIS 221
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US-09-115-409-6
Sequence B. Application US/09335409
Patent No. 6121029
Sample INFORMATION:
APPLICANT: Solupp, Thomas
APPLICANT: Alon, James
APPLICANT: Alon, James
APPLICANT: Alon, James
APPLICANT: Alon, James
APPLICANT: Alon, James
APPLICANT: Carlach, Joern
APPLICANT: Gorlach, Joern
APPLICANT: Gorlach, Joern
TILL OF INVENTION: GMBS FOR THE BIOSYNTHESIS OF EPOTHILONES
FILE REPERENCE: 4-3058A
CURRENT APPLICATION NUMBER: US/09/335,409
CURRENT AILING DATE: 1999-06-17
NUMBER OF SEQ ID NOS: 2.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   14.4%; Score 314; DB 5; Length 412; 27.2%; Pred. No. 7.3e-24;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                56; Mismatches
                       6.0
                  OPERATION SYSTEM: Macintosh System, SOFTWARE: Microsoft Word, 4.0 CURRENT APPLICATION DATA: APPLICATION NUMBER: PCT/US92/10885 FILING DATE: 19921216
                                                                                                                                                                                                                            CR-9000-A
                                                                                                                                                      ATTORNEY/AGENT INFORMATION:
NAME: GALLEGOS, R. THOMAS
REGISTRATION NUMBER: 32,692
REFERENCE/DOCKET NUMBER: CR-90
TELECOMMUNICATION INFORMATION:
TELEPHONE: 302-892-7342
INFORMATION FOR ESQ ID NO: 11:
SEQUENCE CHARACTERISTICS:
LENGTH: 412 amino acids
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ORGANISM: Sorangium cellulosum
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AMINO ACID
                                                                                                                                                                                                                                                                                                                                                                                                          SS: unknown unknown
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    Macintosh
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                                                                                                              FILING DATE: 15
CLASSIFICATION:
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US-09-335-409-8
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SPEHRQELISRPERIPAACEELLRRFSLVADG--RILISDYEFHGVQLKKGDQI--LLPQ 322
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                                                                                                                                                                                                                                                                                                                                   323 MLSGLDERKNACEMHVDESROKVSHTTFGHGSHLCLGOHLARREIIVTLKEWLTRIPDFS 382
                                                                                                                                                                                                                                                                                                                                                      333 ALR--DGTVFSRPDVFRDYRRDTGASLAYGRGPHVCPGVSLARLEABIAVGTIFRRFPEMK 390
                                                                                                                                                                                                                      208 IEORROKP-GIDAISIVANGOVNGRPIISDEAKRMFGLLLVGGLDIVVNFLSFSMEFLAK 266
                                                                                                                                                                                                                                      213 LDERRRNPLENDVLTWLLQAEADGSRLSTKELVALVGALIAAGTDTTIXLIAFAVLNLTR 272
                                                                                                                                                                                        165 PAE-----CDEKFRRFGSAT----ARALGYGLVEQVDEETKTLVASVTEGLALLADV 212
                                                                                                           110 QERALANOVVGMPVVDXLBNRIQELACSLIESLRPQGQCNFTEDYAEPFFIRIFMLLAGL 169
                                                                                                                              105 RVRKLVNPSFTSRAIDLIRABIQRIVDQLLDARSQQBEPUVVRDYARGIPMRAISALLKV 164
                                                                                                                                                                   ----I 207
                                                     ----LIREAXEDYRHESSECPFIPREAGEAYDFIPTSMDPPEOR 109
                                                                           3 GEGANGSETKP.----AFDEKPFAP----GYAEDPFPAIBELREA-TPIFYWD--EGR 48
6 OSNANLAPLPPHVPEHLVFDFDMYNPSNLSAGVQE----AMAVLQESNVPDLVWTRCNGG 61
                                                                                                                                                                     170 PEEDIPHLKYLTDOMTRPDGSMTFABAKBALYDYLTP----
                                                               EWIATAGO
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Search completed: April 6, 2004, 18:56:00 Job time : 15.9588 secs

us-09-246-451a-17.rapb

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GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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April 6, 2004, 18:53:57; Search time 26:1038 Seconds (without alignments) 3108.883 Million cell updates/sec 1 MQLTPTFYDNSCPNVSNIVR.....PLTGTQGQIRLNCRVVNSNS 309 - protein search, using sw model US-09-246-451A-17 1608 Title: Perfect score: OM protein Sequence: Run on:

Gapop 10.0 , Gapext 0.5 **BLOSUM62** Scoring table:

of hits satisfying chosen parameters: 1071772 segs, 262633353 residues Total number Searched:

Post-processing: Minimum Match 0% Maximum Match 100% Listing first 45 summaries Minimum DB seg length: 0 Maximum DB seg length: 2000000000

Database :

Published Applications AA:*

| cgn2_6/ptodata/1/pubpaa/US07_PUBCOMB.pep:*
| cgn2_6/ptodata/1/pubpaa/PCT_MSP_PBS_ppp:*
| cgn2_6/ptodata/1/pubpaa/US06_NEM_PUB.pep:*
| cgn2_6/ptodata/1/pubpaa/US06_NEM_PUB.pep:*
| cgn2_6/ptodata/1/pubpaa/US06_NEM_PUB.pep:*
| cgn2_6/ptodata/1/pubpaa/US07_NEM_PUB.pep:*
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| cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
| cgn2_6/ptodata/1/pubpaa/US08_PUBCOMB.pep:*
| cgn2_6/ptodata/1/pubpaa/US10A_PUBCOMB.pep:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| Result | | and Colory | | | | |
|--------|-------|------------|-----------------|----|----------------------|-------------------|
| 옷 | Score | Match | Watch Length BB | ВЭ | ID | Description |
| i | 1608 | 100.0 | 309 | 15 | US-10-453-104-17 | Sequence 17, Appl |
| 2 | 1603 | 99.7 | 309 | 4 | US-10-274-793-4 | Sequence 4, Appla |
| e | 1601 | 99.6 | 309 | 14 | US-10-274-793-6 | Sequence 6, Appli |
| 4 | 1596 | 99.3 | 309 | 14 | US-10-274-793-18 | Sequence 18, Appl |
| 2 | 1595 | 99.2 | 309 | 74 | US-10-274-793-8 | Sequence 8, Appli |
| 9 | 1595 | 99.5 | | 14 | US-10-274-793-10 | Sequence 10, Appl |
| 7 | 1594 | 99.1 | | 14 | US-10-274-793-12 | Sequence 12, Appl |
| в | 1590 | 98.9 | | 14 | US-10-274-793-14 | Sequence 14, Appl |
| 6 | 1577 | 98.1 | | 14 | US-10-274-793-20 | Sequence 20, Appl |
| 10 | 1577 | 98.1 | 309 | 14 | US-10-274-793-24 | Sequence 24, Appl |
| 11 | 1572 | 97.8 | | 14 | US-10-274-793-22 | Sequence 22, Appl |
| 22 | 921 | 57.3 | | 12 | US-10-424-599-278555 | Sequence 278555, |
| £3 | 912.5 | 56.7 | | 12 | US-10-424-599-250229 | Sequence 250229, |
| 14 | 885 | 55.0 | | 12 | US-10-424-599-251628 | Sequence 251628, |
| 15 | 874.5 | 54.4 | 331 | 2 | US-10-424-599-276196 | Sequence 276196, |

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1 MQLTZTFYONSCPNVSNIVRDITVNELRSDPRIAASILRLHFHDCFVNGCDASILLDNTT 60

| Sequence 18, Appl | Sequence 370, App | 24956 | u | 02 Sequence | 2 Sequence | Sequence 111, App | 60 Sequence 1993 | 168, | 716, | 2314 | 60, A | 396 | Sequence 549, App | Sequence 1905 | Sequence 1496 | Sequence 1603 | ** | Sequence 2367, Ap | Seguence | 279(| Sequence 658, App | 2476 | Sequence 1239, Ar | Sequence 2366 | 2 | Sequence 2383 | 4 Sequence 18454 | 24605 | ά |
|--------------------|-------------------|-------------------|-----------|--------------|----------------------|---------------------|----------------------|---------------------|----------------|------------|-----------------|------------------|---------------------|---------------|----------------------|----------------|-----------|-------------------|------------------|------------------|---------------------|------------------|-------------------|---------------|-----------------|---------------|------------------|-------------------|----------------------|
| 4 US-10-259-165-18 | US-10-259-165-37 | US-10-424-599-249 | 5-114-584 | US-10-424-59 | 2 US-10-425-114-4732 | 4 US-10-289-757-111 | 2 US-10-424-599-1993 | 4 US-10-259-165-168 | US-10-389-566- | -10-389-56 | US-10-259-165-6 | US-10-259-165-39 | 6 US-10-389-566-549 | US-10-389-56 | 6 US-10-389-566-1496 | US-10-389-566- | -389-566- | US-10-389-566-23 | US-10-389-566-86 | US-10-424-599-27 | 6 US-10-389-566-658 | US-10-424-599-24 | US-10-389-566-1 | US-10-389-56 | US-10-425-114-4 | 10-389-56 | US-10-424-599-1 | US-10-424-599-246 | 4 11S-10-174-693-389 |
| 333 1 | 333 I | M | 4 | 358 1 | 339 I | 344 1 | 330 1 | 334 I | 335 1 | 335 1 | 339 1 | 339 1 | 383 1 | 329 1 | 338 1 | 338 1 | 353 1 | 334 1 | 353 1 | 316 1 | 339 1 | 347 1 | 337 1 | 337 1 | 276 1 | 329 1 | 326 1 | 315 1 | 118 |
| 53.5 | 53.5 | 52.6 | 52.0 | 0 | 49.7 | 48.6 | 48.4 | 47.9 | • | 47.7 | 47.7 | 47.7 | 47.7 | 47.6 | 47.2 | 47.2 | 47.1 | 47.0 | 46.3 | 46.1 | 45.9 | 45.7 | 45.6 | 45.6 | 45.6 | 45.4 | 45.3 | 45.2 | |
| 860.5 | 860.5 | 846.5 | 836.5 | 813 | 799 | 781 | 779 | 770.5 | | | 767.5 | 767.5 | 767.5 | 765.5 | 758.5 | 758.5 | 757.5 | 755.5 | 744.5 | 741.5 | 737.5 | 735 | 733.5 | 733.5 | 733 | 730,5 | | | 727 5 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | o n | 0.4 | 41 | 4. 2 | 43 | 44 | 4 |

ALIGNMENTS

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Length 309;
   Sequence 17, Application US/10453104

Sequence 17, Application US/10453104

Fublication No. US20030207345A1

GENERAL INFORMATION:

APPLICANT: Carlifornia Institute of Technology;

APPLICANT: Hyun Joo

TITLE OF INVENTION: Oxygenase Enzymes and Screening Method
FILE REFERENCE: 4556/1E827-US3

CURRENT APPLICATION NUMBER: US/10/453,104

FILE REPEATOR TILING DATE: 2000-00-13

PRIOR PELICATION NUMBER: US 09/661,093

PRIOR PELICATION NUMBER: US 09/246,451

PRIOR APPLICATION NUMBER: US 60/094,403

PRIOR APPLICATION NUMBER: US 60/106,84C

PRIOR APPLICATION NUMBER: US 60/106,84C

PRIOR APPLICATION NUMBER: US 60/106,84C

PRIOR PELING DATE: 1998-01-03

PRIOR FILING DATE: 1998-01-03

PRIOR FILING DATE: 1998-01-03

PRIOR FILING DATE: 1998-05-21

PRIOR APPLICATION NUMBER: US 60/106,834

PRIOR APPLICATION NUMBER: US 60/106,834

PRIOR APPLICATION NUMBER: US 60/106,834

PRIOR APPLICATION NUMBER: US 60/106,834

PRIOR APPLICATION NUMBER: US 60/106,834
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100.0%; Score 1600; DB 15;
Best Local Similarity 100.0%; Pred. No. 7.5e-163;
Matches 309; Conservative 0; Mismatches 0;
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SOFTWARE: FastSEQ for Windows Version 3.0
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US-10-453-104-17
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241 QKGLIQSDQELFSSPNAIDTIPLVRSFANSTQTFFNAFVEAMDRMGNITPLIGTGGGGIRL 332
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     1 MQLIPTEYDNSCPNVSNIVRDTIVNELRSDPRIAASIIRLHFHDCFVNGCDASILLDNTT
                           OKGLIQSDQELFSSPDATDTIPLVRSFANSTQTFFNARVEAMDRMGNITPLTGTQGQIRL
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     241 QKGLIQSDQELFSSPDATDTIPLVRSFANSTQTFFNAFVEAMDRMGNITPLTGTQGQIRL
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APPLICANT: The CHIRCONIN LIN
TITLE OF INVENTION: Expression of Functional Bukaryotic
TITLE OF INVENTION: Expression of Functional Bukaryotic
TITLE OF INVENTION: Proteins
FILE REFERENCE: 3369/IE804-US3
CURRENT APPLICATION NUMBER: US/10/274,793
CURRENT PILING DATE: 2002-10-21
PRIOR APPLICATION NUMBER: US 09/538,591
PRIOR FILING DATE: 2000-09-01
PRIOR FILING DATE: 2000-03-27
PRIOR RILING DATE: 1999-02-09
PRIOR FILING DATE: 1999-02-09
PRIOR FILING DATE: 1999-07-28
PRIOR PLICATION NUMBER: US 60/094,403
PRIOR FILING DATE: 1999-07-28
PRIOR PLICATION NUMBER: US 60/106,840
PRIOR FILING DATE: 1999-11-03
NUMBER OF SEQ ID NOS: 30
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                                                                                                                                                                                                                                                                                                                                                                 GENERAL INFORMATION:
APPLICANT: CALIFORNIA INSTITUTE OF TECHNOLOGY.
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                                                                                                                                                                                                                                                                                                          Sequence 6, Application US/10274793
Publication No. US20030153042A1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        ORGANISM: Escherichia coli
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                                                                                                                                                      121 PLGRRDSLOAFIDIANANLPAPFFTLPQLKDSFRNVGLNRSSDLVALSGGHTFGKNÇCRF 180
                                                                                                                                                                                               121 PLGRRDSLQAFLDLANANLPAPFFTLPQLKDSFRNVGLNRSSDLVALSGGHTFGKNQCRF 180
                                                                                                                                                                                                                                                           IMDRLYNFSNTGLPDPTLNTTYLQTLRGLCPLNGNLSALVDFDLRTPTIFDNKYYVMLJE 240
                                                                                                                                                                                                                                                                                                                                                                                                                  OKGLIQSDQBLFSSPDATDTIPLVRSFANSTOTFFNAFVEANDRMGNITZLTGTOGOIRL 300
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                                                   SFRTEKDAFGNAKSARGFPVIDRMKAAVESACPRTVSCADLLTIAAQQSVTLAGGPSWRV 120
                                                                                                  SFRTEXDAFGNANSARGFPVIDRMKAAVESACPRTVSCADLLTIAAQQSVTLAGGPSWRV 120
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1 MQLTPTFYDNSCENWSNIVRDTIVNELRSDPRIAASILRLHFEDCPVNGCDASILLDNTT 60
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Fred. No. 2.6e-162;
1; Mismatches 0; Indels 0
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| Sequence 4, Application US/10274793
| Publication No. US20030153042A1
| GENERAL INFORMATION:
| APPLICANT: CALIFORNIA INSTITUTE OF TECHNOLOGY;
| APPLICANT: CALIFORNIA INSTITUTE OF TECHNOLOGY;
| APPLICANT: Tanagelin Lin
| TILLE OF INVENTION: Expression of Functional Eukaryotic
| TILLE OF INVENTION: proteins
| TILLE OF INVENTION: proteins
| TILLE OF INVENTION: Droteins
| TILLE OF INVENTION: Droteins
| TILLE OF INVENTION: Droteins
| TILLE OF INVENTION: 2369/1E804-US3
| CURRENT APPLICATION NUMBER: US/09/654,493
| PRIOR APPLICATION NUMBER: US 09/247,232
| PRIOR APPLICATION NUMBER: US 09/247,232
| PRIOR PRILING DATE: 1999-02-09
| PRIOR FILING DATE: 1999-02-09
| PRIOR PRILING DATE: 1998-02-09
| PRIOR APPLICATION NUMBER: US 60/094,403
| PRIOR APPLICATION NUMBER: US 60/096,840
| PRIOR PRILING DATE: 1998-11-03
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           NUMBER OF SEQ ID NOS: 30
SOFTWARE: FastSEQ for Windows Version 3.0
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Best Local Similarity 99.7%;
Matches 308; Conservative
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; TYPE: PRT
; ORGANISM: Escherichia coli
US-10-274-793-8
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Matches 306; Conservative
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                                                               GENERAL INCRMATION:

APPLICANT: CALIFORNIA INSTITUTE OF TECHNOLOGY;

APPLICANT: Frances S. ARNOLD

APPLICANT: Exanglin LiN

TITLE OF INVENTION: Expression of Functional Bukaryotic

TITLE OF INVENTION: Expression of Functional Bukaryotic

TITLE OF INVENTION: Expression of Functional Bukaryotic

TITLE OF INVENTION: Expression of Functional Bukaryotic

TITLE OF INVENTION: Expression of Functional Bukaryotic

TITLE OF INVENTION: Expression of Functional Bukaryotic

FRICA RAPLICATION NUMBER: US/10/12/14/193

PRICA FILING DATE: 20:00-00-01

PRICA FILING DATE: 1993-02-09

PRICA RAPLICATION NUMBER: US 60/106,840

PRICA RAPLICATION NUMBER: US 60/106,840

PRICA FILING DATE: 1998-01-03

NUMBER OF SEQ ID NOS: 30

SEQ ID NO 18

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Publication No. US20030153042A1;
GENERAL INPORMATION:
APPLICANT: CALIFORNIA INSTITUTE OF TECHNOLOGY;
APPLICANT: Frances S. ARNOLD
APPLICANT: Trances S. ARNOLD
APPLICANT: Trances S. ARNOLD
APPLICANT: Propertion of Functional Eukaryotic
TITLE OF INVENTION: Expression of Functional Eukaryotic
TITLE OF INVENTION: DECERING
FILE REFERENCE: 3369/1804-403
CURRENT APPLICATION NUMBER: US/10/274,793
CURRENT FILING DATE: 2002-10-21
PRIOR FILING DATE: 2000-09-31
PRIOR FILING LANGES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVICES CONDUCTOR SERVI
Publication No. US20030153042A1
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                                                     GENERAL INFORMATION:
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US-10-274-793-8
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241 QKGLIQSDQELFSSPNATDTIPLVRSFAKSTQTFFNAFVBAMDRMGNITPLIGTGGGGIRL 300
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Pred. No. 1.8e-161;
2; Mismatches 1; Indels 0
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APPLICANT: Trances S. ARNOLD
APPLICANT: Trances S. ARNOLD
TITLE OF INVENTION: Expression of Functional Bukaryotic
TITLE OF INVENTION: Expression of Functional Bukaryotic
TITLE OF INVENTION: Expression of Functional Bukaryotic
TITLE OF INVENTION: Proteins
FILE REFERENCE: 3369/1E804-US3
CURRENT APPLICATION NUMBER: US/09/654,493
PRIOR APPLICATION NUMBER: US/09/654,493
PRIOR APPLICATION NUMBER: US/09/654,493
PRIOR FILING DATE: 2000-09-01
PRIOR FILING DATE: 1999-02-09
PRIOR FILING DATE: 1999-02-09
PRIOR FILING DATE: 1998-02-09
PRIOR APPLICATION NUMBER: US/06/06,840
PRIOR FILING DATE: 1998-11-03
NUMBER OF SEQ ID NOS: 30
SOFTWARE: FastSEQ for Windows Version 3.0
LEMOTH: 309
LEMOTH: 309
PRIOR FILING DATE: 2000-03-27
PRIOR APPLICATION NUMBER: US 09/247,232
PRIOR FILING DATE: 1999-02-09
PRIOR PLING DATE: 1999-07-28
PRIOR FILING DATE: 1998-07-28
PRIOR PRIOR APPLICATION NUMBER: US 6C/106,840
PRIOR PLING DATE: 1998-11-03
NUMBER OF SEQ ID NOS: 30
SOFTWARE: FREUSEQ for Windows Version 3.0
SEQ ID NO 8
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                               PLGRRDSLQAFLDLANANLPAPFFTLPQLKDSFRNVGLNRSSDLVALSGGHTFGKNQCRF 180
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241 QKGLIQSDQELFSSPNATDITPLVRSFANSTQTFFNAFVEANDRMGNITELIGTQGQIRL 300
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                                                                        121 PLGRRDSLQAFPDLANANLSAPFFTLPQLKDSFRNVGLNRSSDLVALSGGHTFGKNQCRF
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APPLICANT: Frances S. ARNOLD
APPLICANT: Zanglin LIN
ITILE OF INVENTION: Expression of Functional Eukaryotic
ITILE OF INVENTION: Expression of Functional Eukaryotic
ITILE OF INVENTION: Expression of Functional Eukaryotic
ITILE OF INVENTION: Expression of Functional Eukaryotic
ITILE OF INVENTION: Expression of Functional Eukaryotic
ITILE OF INVENTION: Expression of Functional Eukaryotic
FILE REFERENCE: 3369/1862-10-21
CURRENT APPLICATION NUMBER: US/09/654,493
PRIOR FILING DATE: 2000-03-01
PRIOR FILING DATE: 1990-02-09
PRIOR FILING DATE: 1990-02-09
PRIOR FILING DATE: 1990-07-28
PRIOR FILING DATE: 1990-07-28
PRIOR FILING DATE: 1998-11-03
NUMBER OF SEQ ID NOS: 30
SOFTWARE: FastSEQ for Windows Version 3.0
SEQ ID NO 14
LEAGTH: 309
LENGTH: 309
LENGTH: 309
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Pred. No. 6.3e-161;
1; Mismatches 2;
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Best Local Similarity 99.0%;
Matches 306; Conservative
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                                                      99.2%; Score 1595; DB 14; Length 309; 99.0%; Pred. No. 1.8e-161;
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Sequence 1.2 Application US/10274793
Fublication No. US20030153042A1
GENERAL INFORMATION:
APPLICANT: CALIFORNIA INSTITUTE OF TECHNOLOGY;
APPLICANT: CALIFORNIA INSTITUTE OF TECHNOLOGY;
APPLICANT: Tanagin Lin
TITLE OF INVENTION: Expression of Functional Eukaryotic
TITLE OF INVENTION: Expression of Functional Eukaryotic
TITLE OF INVENTION: Expression of Functional Eukaryotic
TITLE OF INVENTION: Expression of Functional Eukaryotic
TITLE OF INVENTION: Expression of Functional Eukaryotic
TITLE OF INVENTION: Expression of Functional Eukaryotic
FILE REFRENCE: 3369/1E804-US3
CURRENT APPLICATION NUMBER: US/09/654,493
PRIOR APPLICATION NUMBER: US 09/538,591
PRIOR FILING DATE: 2000-03-27
PRIOR FILING DATE: 2000-03-27
PRIOR FILING DATE: 1999-02-09
PRIOR FILING DATE: 1999-02-09
PRIOR FILING DATE: 1999-02-09
PRIOR FILING DATE: 1998-11-03
NUMBER OF SEQ ID NUMBER: US 60/106,840
NUMBER OF SEQ ID NOS: 30
SOFTWARE: PARLSEQ for Windows Version 3.0
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Pred. No. 2.4e-161;
2; Mismatches 1;
                                                                                                             2; Mismatches
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Best Local Similarity 99.0%;
Matches 306; Conservative
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US-10-274-793-10
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ORGANISM: Escherichia coli
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                                                                                                                                                                                                                       Sequence 29.20
| Sequence 29.20
| Publication No. US20030153042A1 |
| GENERAL INFORMATION: |
| APPLICANT: CALIFORNIA INSTITUTE OF TECHNOLOGY; |
| APPLICANT: CALIFORNIA INSTITUTE OF TECHNOLOGY; |
| APPLICANT: Frances S. ARNOLD |
| APPLICANT: APPLICANT: AND INTERPRETATION: Expression of Functional Bukaryotic |
| TITLE OF INVENTION: Procession of Functional Bukaryotic |
| TITLE OF INVENTION: Procession of Functional Bukaryotic |
| TITLE OF INVENTION: Procession of Functional Bukaryotic |
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| TITLE OF INVENTION: Procession of Functional Bukaryotic |
| TITLE OF INVENTION: Procession of Functional Bukaryotic |
| TITLE OF INVENTION NUMBER: US/09/654,493 |
| PRIOR FILING DATE: 1998-02-09 |
| PRIOR FILING DATE: 1998-02-09 |
| PRIOR FILING DATE: 1998-02-08 |
| PRIOR FILING DATE: 1998-01-08 |
| PRIOR FILING DATE: 1998-11-03 |
| PRIOR FILING DATE: 1998-11-03 |
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Pred. No. 1.5e-159;
1; Mismatches 4;
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Sequence 24, Application US/10274793
Publication No. US20030153042A1
GENERAL INFORMATION:
APPLICANT: CALIFORNIA INSTITUTE OF TECHNOLOGY;
APPLICANT: Frances S. ARNOLD
APPLICANT: Zhanglin LIN
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SOFTWARE: FastSEQ for Windows Version 3.0
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Best Local Similarity 98.4%;
Matches 304; Conservative
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US-10-274-793-20
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US-10-274-793-20
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TITLE OF INVENTION: Expression of Functional Bukaryotic TITLE OF INVENTION: proteins FILE REPERENCE: 3369/18304-353; CURRENT APPLICATION NUMBER: US/10/274,793 CURRENT FILING DATE: 2002-10-21 PRIOR APPLICATION NUMBER: US/09/654,493 PRIOR FILING DATE: 2000-03-27 PRIOR FILING DATE: 2000-03-27 PRIOR FILING DATE: 1999-02-09 PRIOR PLING DATE: 1999-02-09 PRIOR APPLICATION NUMBER: US 60/094,403 PRIOR PLING DATE: 1999-02-08 PRIOR PLING DATE: 1999-07-28 PRIOR PLING DATE: 1996-07-28 PRIOR PLING DATE: 1996-11-03
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SOFTWARE: FastSEQ for Windows Version 3.0
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APPLICANT: La Rosa Thomas J
APPLICANT: La Rosa Thomas J
APPLICANT: Kovalic David K
APPLICANT: Zhou Yihua
APPLICANT: Zhou Yihua
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REPERRACE: 38-21(5323) B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT APPLICATION DATE: 2003-04-28
NUMBER OF SEQ ID NCS: 285684
SEQ ID NO 250229
LENGTH: 354
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                                                                                                                                           206 INRLYNFSNTGNPDPTLATTYLEVLRARCPQNATGDNLTNLDLSTPDQFDNRYYSNLLQL 265
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                           122 LGRRDSLQAFLDLANANLPAPFFTLPQLKDSFRNVGLNRSSDLVALSGGHTFGKNQCRF1 181
                                                                                                                                                                                                   242 KGLIQSDQELFSSPDATDTIPLVRSFANSTQTFFNAFVEAMDRMGNITPLTGTQGQIRLN 301
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57.5%; Pred. No. 1.8e-88;
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US-10-424-599-251628
; Seguence 251628, Application US/10424599
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Best Local Similarity 57.59
Matches 177; Conservative
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APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(53223)B
CURRENT APPLICATION NUMBER: US/10/424,599
NUMBER OF SEQ ID NOS: 285684
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      181 IMDRLYNFSNTGLPDPTLNTTYLQTLRGLCPLNGNLSALVDFDQRTPTIFDNKYYVNLBE
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             121 PLGRRDSLQAFLDLANANLPAPFFTLPQLKDSFRNVGLNRSSDLVALSGGGFTFGKNQCRF
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                                                                                                                                                                                                                                                                                                                1 MOLIPIFYDNSCPNVSNIVRDIIVNEIRSDPRIAASILRIHFHDCFVNGCDASILLDNTT
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                                                                                                                                                                                                                        Score 1572; DB 14;
Pred. No. 5.3e-159;
1; Mismatches 5;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         40; Mismatches
PRIOR APPLICATION NUMBER: US 60/106,840 RIOR FILING DATE: 1998-11-03 NUMBER OF SEQ ID NOS: 30 SOFTWARE: FastSEQ for Windows Version 3.0
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 278555, Application US/10424599
Publication No. US20040031072A1
GENERAL INFORMATION:
                                                                                                                                                                                                                        97.8%;
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APPLICANT: Kovalic David K
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ORGANISM: Escherichía coli
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ORGANISM: Glycine max
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Best Local Similarity
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US-10-424-599-278555
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US-10-424-599-278555
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                                                                                                           LENGTH: 309
                                                                                        SEQ ID NO 22
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Job time : 28.1038 secs
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    ; OTHER INFORMATIUN
US-10-424-599-276196
                                                                 Query Match
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              GENERAL INFORMATION:

APPLICANT: La Rosa Thomas J
APPLICANT: La Rosa Thomas J
APPLICANT: La Rovalic David K
APPLICANT: Shou Yihua
APPLICANT: Cao Yongwei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REFERENCE: 38-21(5223)B
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
SEQ ID NO 251628
LENGTH: 353
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APPLICANT: La Rosa Thomas J
APPLICANT: La Rosa Thomas J
APPLICANT: Show Yihua
APPLICANT: Can Voicywei
TITLE OF INVENTION: Soy Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof for Plant Improvement
FILE REPERENCE: 38-21(53223) B
CURRENT APPLICATION NUMBER: US/10/424,599
CURRENT FILING DATE: 2003-04-28
NUMBER OF SEQ ID NOS: 285684
LENGTH: 331
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             148 LGRRDXLTANRTLANQNLPAPFFNLTQPKAAFAVQGLD-TTDLVALSGAHSFGRVRCLFI 206
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        207 LDRLYNPSGTGRPDPTLDTTYLKOLROTCPGGPPNNLVNPDPTTPDTLDKNYYSNLOVK 266
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        267 KGLLQSDQELFSTPGA-DTISIVNKFSSBQIAFFKSFSASMIKMGNIGVLTGKKGEIRKQ 325
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          182 MDRLYMFSNIGLPDPTLNITYLQTLRGLCPLNGNLSALVDFDLRIPTIFDNKYYVNLEEG 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       62 FRIEKDAFGNANSARGFPVIDRMKAAVESACPRIVSCADLLIIAAQOSVTLAGGPSWRVP 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LGRRDSLQAFLDLANANLPAPFFTLPQLKDSFRNVGLNRSSDLVALSGGHTFGKNQCRFI 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              242 KGLIQSDQELFSSPDATDTIPLVRSFANSTQTFFNAFVEAMDRMGNITPLIGTQGQIRLN 301
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55.8%; Pred. No. 1.5e-85;
tive 48; Mismatches 86; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                     OTHER INFORMATION: Clone ID: PAT_MRT3847_69247C.1.pep
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Publication No. US20040031672A1
GENERAL INFORMATION:
Publication No. US20040031072A1
                                                                                                                                                                                                                                                                                                                                                                                                   LOCATION: (1)..(353)
OTHER INFORMATION: unsure at
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Best Local Similarity 55.8°
Matches 172; Conservative
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                                                                                                                                                                                                                                                                                                          TYPE: PRT
ORGANISM: Glycine max
PEATURE:
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                                                                                                                                                                                                                                                                                                              59 TTSFRIEKDAPGNANSARGFPVIDRMKAAVESACPRIVSCADLLIIAAQQSVTLAGGPSW
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                                                                                                                                                                                                  2 QLTPTFYDNSCPNVSNIVRDTIVNELRSDPRIAASILLRLHFHDCFVNGCDASILLD---N
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                                                                                                                                           Gaps
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                                                                                 Length 331,
                                                                                    54.4%; Score 874.5; DB 12; Length
55.8%; Pred. No. 1.8e-84;
ive 55; Mismatches 75; Indels
OTHER INFORMATION: Clone ID: PAT_MRT3847_91424C.1.pep
                                                                                                                                     Matches 173; Conservative
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322 RTDCKKLNGS 331
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US-08-190-029A-10
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Sequence 10, Appl
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Sequence 2, Appli
Sequence 319, Appl
Sequence 319, App
Sequence 318, App
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Sequence 398,
Sequence 378,
Sequence 11, A
Sequence 11, A
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1 MQLIPIFYDNSCPNVSNIVR.....PLIGTQGQIRINCRVVNSNS 309
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.. /cgn2_6/ptodata/2/iaa/PCTUS_COMB.pep:*
GenCore version 5.1.6
Copyright (c) 1993 - 2004 Compugen Ltd.
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US-08-615-192A-387
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US-08-868-577-13
US-08-615-192A-394
US-09-615-192A-397
US-09-615-192A-397
US-08-671-320-15
US-08-671-320-17
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US-08-671-320-17
US-08-671-320-17
US-08-671-320-17
US-08-671-320-335
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Maximum Match 100%
Listing first 45 summaries
                                                                                        - protein search, using sw model
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Gapop 10.0 , Gapext 0.5
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seq length: 200000000
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| US-09-615-192A-384 Sequence US-09-615-192A-388 Sequence US-09-615-192A-319 Sequence US-09-615-192A-332 Sequence US-08-15-192A-332 Sequence US-08-15-192A-376 Sequence US-08-15-192A-366 Sequence US-08-15-192A-366 Sequence US-08-15-192A-366 Sequence US-08-15-192A-386 Sequence | 09-615-192A-400 09-615-192A-400 09-615-192A-390 09-615-192A-390 09-615-192A-392 09-615-192A-398 09-615-192A-398 09-748-264A-2 | #190029A rd Mark Y ANALOGUES WITCOFF, LTD. IVE, SUITE 300C #10, 029A #2,190,029A #3,190,029A #1,16325.3 1116325.3 |
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| 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 | 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | T. 1 1-19C-029A-10 Wence 10, Application US/0819029A Wence 10, 5736363 WERAL INFORMATION: APPLICANT: BOWANDS, Richard Mark APPLICANT: BOWANDS, Richard Mark APPLICANT: BOWANDS, RICHARD TITLE OF INVENTION: NUMBER OF SEQUENCES: 12 CORRESPONDENCE ADLESSY ADRESSEB: ALLEGRETTI & WITCOFF STREET: 10 S. WACKER DRIVE, SUI CITY: CHICAGO STATE: LILINOIS COUNTRY: U.S.A. ZIP: 6606 COMPUTER READABLE FORM: MEDIUM TYPE: Floppy disk COMPUTER: IBM PC compatible OPERATING SYSTEM: PC-DOS/MS-DOS SOFTWARE: PAPLICATION DATA: APPLICATION DATA: APPLICATION NUMBER: US/08/190, OFILING DATE: 28-FEB-1994 CLASSIFFCATION DATA: APPLICATION DATA: APPLICATION NUMBER: US/08/190, OFILING DATE: 29-JUL-1992 APPLICATION NUMBER: GB 910325. APPLICATION NUMBER: GB 9116325. APPLICATION NUMBER: GB 9116325. APPLICATION NUMBER: 26,949 REGISTRATION NUMBER: 26,940 |
| 22222222222222222222222222222222222222 | 2. 1. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. | |
| 347 847 3443 3443 3443 2983 2988 27888 3888 | 268.5 244.5 237.5 235.5 200 121.5 | SULT 1 -08-19C-029A-10 Sequence 1D, Applicati Sequence 1D, Applicati APPLICANT: BUWADDS APPLICANT: BUWADDS APPLICANT: BAWDEN, TITLE OF INVENTICES: CORRESPONDENCE ADDR ADDRESSEE: ALLEG CORRESPONDENCE ALLEG STAFE: ILLINOIS COUNTRY: CHICAGO STAFE: ILLINOIS COUNTRY: U.S.A. ZIP: 6606 COMPUTER READBLE F MEDIUM TYPE: Flo COMPUTER: ESPECT COMPUTER: ESPECT COMPUTER: ESPECT COMPUTER: ESPECT COMPUTER: ESPECT COMPUTER: ESPECT COMPUTER: ESPECT COMPUTER: ESPECT COMPUTER: ESPECT COMPUTER: ESPECT COMPUTER: ESPECT COMPUTER: SPECT COMPUTER: SPECT COMPUTER: DATE: 28- CLASSIFICATION NUMBE FILING DATE: 27- PRIOR APPLICATION DA APPLICATION NUMBE FILING DATE: 29- ATTORNEY/AGENT INFO NAME: JOHN J. MC REGISTRATION NUMBE REPREMENT/ONEY/AGENT ONE REPREMENT/ONEY/ATTONIONE REPREMENT/ONEY/ATTONIONE REPREMENT/ONEY/ATTONIONE REPREMENT/ONEY/ATTONIONE REPREMENT/ONEY/ATTONIONE REPREMENT/ONEY/ATTONIONE REPREMENT/ONEY/ATTONIONE REPREMENT/ONEY/ATTONIONE REPREMENT/ONEY/ATTONIONE REPREMENT/ONEY/ATTONIONE REPREMENT/ONEY/ATTONIONE REPREMENT/ONEY/ATTONION |
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90.9%; Score 1462; DB 1; Length 349;

Query Match

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TOPPLOGY: 1in-INFORMATION FOR SEQ ID NO: SEQUENCE CHARACTERISTICS:

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Sequence 22, Application US/09207914A Patent No. 6586583
                                            90.94;
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                                                          Best Local Similarity 99.6
Matches 281; Conservative
MCLECULE TYPE: protein
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US-08-462-695-10
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Best Local
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                                                                                                                                            61 SPRIEKDAFGNANSARGFPVIDRMKAAVESACPRIVSCADLITIAAQOSVILAGGPSKRV 120
                                                                         1 MOLIPTEYENSCPNVSNIVRDTIVNELRSDPRIAASILRIAFHDCEVNGCDASILLDNTT
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CZEP: 60500

MEDIUM TYPE: Floppy disk

COMPUTER: IEM PC COMPATIBLE

COMPUTER: IEM PC COMPATIBLE

COMPATE: PATENT: PC-DOS/MS-DOS

SOFTWARE: PATENTIN Release #1.0, Version #1.25

CURSTITUTION NUMBER: US/08/462,695

FILING DATE: 5-UN-1995

CLIASSIPICATION NUMBER: 08/190,029

FILING DATE: 28-FEB-1994

PRICK APPLICATION NUMBER: PCT/GB92/01389

FILING DATE: 27-UU-1992

PRICK APPLICATION NUMBER: B PCT/GB92/01389

FILING DATE: 27-UU-1992

PRICK APPLICATION NUMBER: GB 9202401.7

FILING DATE: 05-FEB-1992

PRICK APPLICATION NUMBER: GB 9116325.3

FILING DATE: 05-FEB-1992

FILING DATE: 29-UU-1991

ATTORNEY/AGENT INFORMATION: NUMBER: GB 9116325.3
              Best local Similarity 99.6%; Pred. No. 3.8e-151;
Matches 281; Conservative 1; Mismatches 0;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  ADDRESSEE: BANNER & ALLEGRETTI, LTD. STREET: 10 S. WACKER DRIVE, SUITE 3000 CITY: CHICAGO STATE: ILLINOIS
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                       APPLICANT: EDWARDS, Richard Mark
APPLICANT: BAWDEN, Lindsey
TITLE OF INVENTION: 1GF-11 ANALOGUES
NUMBER OF SEQUENCES: 12
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                          Sequence 10, Application US/08462695
Patent No. 5854025
GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  26,949
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TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            TELBFAX: 312-715-1234
INFORMATION FOR SEQ ID NO: 10:
SEQUENCE CHARACTERISTICS:
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amino acid
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TOPOLOGY: linear
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: U.S.A.
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242 KGLIQSDQELESSPDATDITBIVRSFANSTQTPFNAEVEAMDRMGNITPLIGIQGIRLN 301
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                                                                                                                                                                                                                                           APPLICANT: Vierling Jr., Richard A.
APPLICANT: Vierling Jr., Richard A.
TITLE OF INVENTION: A Soybean Peroxidase Gene Family
FILE OF INVENTION: Detecting Soybean Peroxidase Activity
FILE REPRENCE: Soybean Peroxidase Gene Family
FILE REPRENCE: Soybean Peroxidase Gene Family
CURRENT APPLICATION NUMBER: US 08/868,577
FARLER PILING DATE: 1998-12-09
FARLIER FILING DATE: 1997-06-04
FARLIER PILING DATE: 1997-06-04
FARLIER FILING DATE: 1997-06-04
FARLIER PILING DATE: 1995-10-27
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Length 349;
                                                         Indels
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  Score 1462; DB 2;
Pred. No. 3.8e-151;
1; Mismatches 0;
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                                                                       COUNTRY:
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STATE:
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266 NGLLQSDQSLFSTPGA-DTIPIVNSFSSNQNTFFSNFRVSMIKMGNIGVLTGDEGEIRLQ 324
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TITLE OF INVENTION: Regulatory Sequences for Transgenic Plants
NUMBER OF SEQUENCES: 59
CORRESPONDENCE ADDRESS:
                                                                                                                                                                                                                                                                                                                                                                                                                                       DB 3; Length 324;
                                                                                                                                                                                                                            TITLE OF INTENTION NO. 6278041el Peroxidase Gene Sequences FILE REFERENCE: S-31081Pl
CURRENT APPLICATION NUMBER: US/09/365,150
CURRENT FILING DATE: 1999-07-30
NUMBER OF SEQ ID NOS: 6
SOFTWARE: Parentin Ver. 2.0
LENGTH: 324
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al Similarity 50.3%; Pred. No. 7.7e-77;
154; Conservative 59; Mismatches 88;
                                                                                                                                                                                                                                                                                                                                                                 TYPE: PRT ORGANISM: Wicctiana tomentosiformis
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Ainley, Michael
Armstrong, Katherine
Belmar, Scott
Folkerts, Otto
Hopkins, Nicole
Menke, Michael A.
Pareddy, Dayakar
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                                                                                                                                US-09-365-150-2; Sequence 2, Application US/09365150; Patent No. 6278041; GENERAL INPORMATION;
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Smith, Kelley
                                                                                                                                                                                                APPLICANT: Lagrimini, Mark
APPLICANT: Desai, Nalini
                                                                 CNFVNGDS 332
                                302 CRVVNSNS 309
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APPLICANT:
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Best Local S:
Matches 154
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90 VSEKGSNPNRNSLRGFEVIDQIKAALEAACPGTVSCADIVALAARDSTALVGGPYWDVPL 149
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  243 GLIQSDQELFSSPDATDTIPLVRSFANSTQTFFNAFVEAMDRMGNITPLIGTQGQIRLNC 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   30 LFPQFYDHSCPKAKEIVQSIVAQAVAKETRMAASLVRLHFHDCFWKGCDASVLLDNSSSI
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APPLICANT: Bloksberg, Leonard N.
APPLICANT: Bloksberg, Likea
TITLE OF INVENTION: Materials and Methods for the
TITLE OF INVENTION: Modification of Plant Lignin Content;
FILE REFERENCE: 11000.1003.40
CURRENT APPLICATION NUMBER: US/09/615,192A
CURRENT APPLICATION NUMBER: US 08/975,316
PRIOR APPLICATION NUMBER: US 08/975,316
PRIOR PLILING DATE: 1997-111-21
PRIOR PLILING DATE: 1996-09-11
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Indels
                                                                                                                                                                                                                                  SOFTWARE: Patentin Release #1.0, Version #1.30 CURRENT APPLICATION DATA: APPLICATION NUMBER: US/09/097,319A
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              47.8%; Score 768.5; DB 4 49.7%; Pred. No. 2.1e-75;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              52; Mismatches
ADDRESSE: Dowelanco Patent Department
STREET: 9330 Zionsville Road
CITY: Indianapolis
                                                                                                                 ZIP: 46268
COMPUTER READABLE FORM:
MEDLUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 389, Application US/09615192A
Patent No. 6410718
                                                                                                                                                                                                                                                                                         APPLICATION BOO CLASSIFICATION: 800
ATTORNEY/AGENT INFORMATION:
NAME: Stuart, Donald R
TELECOMMUNICATION INFORMATION:
                                                                                                                                                                                                                                                                                                                                                                                                                                                           TELEFAX: 317 337 4847
INFORMATION FOR SEQ ID NO: 2:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Query Match
Best Local Similarity 49.74
Matches 152; Conservative
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LENGTH: 333 amino acids
TYPE: amino acid
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88 ITGEKTANPNANSARGFDVIDTIKSNVEKACSGVVSCADILAIAARDSVVELGGPSWTVM 147
                                                                                                                                 148 IGRRDSTTASKSGANSNIPPPTSSLSNLISLFÇAQGLS-AKEMVALSGGHTIGQAÇCKNP 206
                                                                                                                                                                                                      182 MDRLYNFSNTGLPDPTLNTTYLQTLRGLCPL----NGNLSALVDFDLRTPT1FDNKYYV 236
                                                                                                                                                                                                                                                                                                                              62 FRTEKDAFGNANSARGFPVIDRMKAAVESACPRTVSCADLLTIAAQQSVTLAGGPSWRVP 121
                                                                                                        122 IGRRDSLQAFLDLAKANLPAPFFTLPQLKDSFRNVGLNRSSDLVALSGGHTFGKNQCRFI 181
                                                                                                                                                                                                                                                                                                  237 NLBEQKGLIQSDQELFSSPDATDTIPLVRSFANSTQTFFNAFVEAMDRMGNITPLTGTQG 296
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         182 MDRLYNFSNTGLPDPTLNTTYLQTLRGLCPLNGNLSALVDFDLRTPTIFDNKYYVNLEEQ 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 19
                                                                                                                                                                                                                                               207 RAHIYNETN-----IDSAYATSLRSKCPSTTGSGDSNLSPL---DYMTPTVFDKNYYS
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APPLICANT: Bloksberg, Leonard N.
APPLICANT: Bloksberg, Leonard N.
APPLICANT: Bloksberg, Leonard N.
TITLE OF INVENTION: Materials and Methods for the
TITLE OF INVENTION: Modification of Plant Lignin Content;
FILE REFRENCE: 11000.1003c4U
CURRENT APPLICATION NUMBER: US/09/615,192A
CURRENT FILING DATE: 2000-07-12
PRIOR APPLICATION NUMBER: US 08/975,316
PRIOR APPLICATION NUMBER: US 08/975,316
PRIOR FILING DATE: 1997-11-21
PRIOR APPLICATION NUMBER: US 08/713,000
PRIOR FILING DATE: 1998-10-09
NUMBER OF SEQ ID NOS: 405
SOUTHARE: FastSEQ for Windows Version 3.0
SEQ ID NO 378
LENGTH: 315
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44.7%; Score 719.5; DB 4;
Best Local Similarity 49.2%; Pred. No. 4.4e-70;
Matches 151; Conservative 46; Mismatches 95;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Sequence 378, Application US/09615192A Patent No. 6410718
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    ) ORGANISM: Eucalyptus grandis
US-09-615-192A-378
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                                                                                                                                                                                                                                                                                                                                                                                             84
                                                                                                                                                                                                                                                                                                                                             2 QLTFTFYDNSCPNVSNIVRDTIVNBLRSDPRIAASILRIHFHDCFVNGCDASILLDNTTS 61
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                                                                                                                                                                                                                                                 Length 318;
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APPLICANT: Bloksberg, Leonard N.
APPLICANT: Bloksberg, Leonard N.
APPLICANT: Havukkala, TINKa
TITLE OF INVENTION: Materials and Methods for the
FILE REFERENCE: 11000.1003c4U
CURRENT APPLICATION NUMBER: US/09/615,192A
CURRENT FILING DATE: 2000-07-12
PRIOR PELICATION NUMBER: US 08/975,316
PRIOR FILING DATE: 1996-09-11
PRIOR APPLICATION NUMBER: US 08/713,000
PRIOR FILING DATE: 1996-09-11
PRIOR FILING DATE: 1996-09-11
PRIOR FILING DATE: 1996-09-13
NUMBER OF SEQ ID NOS: 405
NUMBER OF SEQ ID NOS: 405

SOFFWARE: FastSEQ for Windows Version 3.0
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49.0%; Pred. No. 2.1e-70;
ative 49; Xismatches 90;
                                                                                                                                                                                                                                               Score 727.5; DB 4;
Pred. No. 5.9e-71;
                                                                                                                                                                                                                                                                                                  95;
                                                                                                                                                                                                                                                                                               48; Mismatches
PRIOR APPLICATION NUMBER: US 09/169,789
PRIOR FILING DATE: 1998-10-09
NUMBER OF SEQ ID NOS: 405
SSOFTARE: FastSEQ for Windows Version 3.0
LENGTH: 318
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                                                                                                                                                                                                                                            Query Match
Best Local Similarity 49.5%;
Matches 151; Conservative 40
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                                                                                                                                            TYPE: PRT ORGANISM: Pinus radiata
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Best Local Similarity
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Best Local Similarity
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US-09-615-192A-395
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US-08-671-320-11
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STATE:
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Patent No. 5840528
Patent No. 5840528
GENERAL INFORMATION:
APPLICANT: VIENLING JR, RICHARD A
TITLE OF INVENTION: A SOYBEAN PEROXIDASE GENE FAMILY AND AN
TITLE OF INVENTION: ASSAY FOR DETECTING SOYBEAN PEROXIDASE ACTIVITY:
CORRESSONDENCES: 17
CORRESSONDENCE ADDRESS:
ADDRESSEE: 1125 SO. 103RD STREET
STREET: SUITE 330
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48.6%; Pred. No. 3.6e-62;
ative 46; Mismatches 78; Indels 19
                                                                                                                                                                                                                                                                                                                                        TITLE OF INVENTION: Materials and Methods for the TITLE OF INVENTION: Materials and Methods for the TITLE OF INVENTION: Madification of Plant Lignin Content FILE REFRENCE: 11000.1003-640 (CURRENT APPLICATION NUMBER: US 08/975,136 (CURRENT FILING DATE: 2000-07-12 (PRIOR PILING DATE: 1997-11-21 (PRIOR PILING DATE: 1997-11-21 (PRIOR FILING DATE: 1997-09-11 (PRIOR FILING DATE: 1996-09-11 (PRIOR FILING DATE: 1998-10-09 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER OF SEQ ID NOS: 405 (NUMBER 
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                                                                                                                                                                  Sequence 387, Application US/09615192A
Patent No. 6410718
GENERAL INFORMATION:
APPLICANT: Bloksberg, Leonard N.
APPLICANT: Havukkala, 11kka
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COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
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Best Local Similarity 48.6*
Matches 135; Conservative
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ORGANISM: Pinus radiata
US-09-615-192A-387
       309 KNCRKVN 315
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62 FRIEKDAFGNANSARGFPVIDRMKAAVESACPRIVSCADLLIIAAQQSVTLAGGPSWRVP 121
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       22 QLQLGFYANSCPKABQIVLKFVHDHIHNAPSLAAALIRMFFHDCFVRGCDASVLLNSTTN
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Patent No. 5866695

GENERAL INFORMATION:
APPLICANT: Vierling Jr., Richard A
TITLE OF INVENTION: ASSAY FOR DETECTING SOYBEAN PEROXIDASE GENE FAMILY AND AN
TITLE OF INVENTION: ASSAY FOR DETECTING SOYBEAN PEROXIDASE ACTIVITY
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
ADDRESSEE: Rothwell, Figg, Ernst & Kurz
STREET: 555 13th Street NW, Suite 701 East
CITY: Washington
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                      SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
PAPLICATION NUMBER: US/08/671,320
FILING DATE:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  37.0%; Score 594.5; DB 2; 39.9%; Pred. No. 2.1e-56; ive 63; Mismatches 115;
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PC-DOS/MS-DOS
                                                                                                         CLASSIFICATION: 435
ATTORNEY/AGENT INFORMATION:
NAME: JONDIE, ROBERT J.
REGISTRATION NUMBER: 33,915
REFRENCE/DOCKET NUMBER: 1227
TELECOMMUNICATION: 4622-398-9000
                                                                                                                                                                                                                                                                                                                                                        LENGTH: 324 amino acids
                                                                                                                                                                                                                                                                       TELERAX: 402-398-9005
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
LENGTH: 324 amino acid
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Best Local Similarity 39.99
Matches 123, Conservative
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MEDIUM TYPE: Floppy
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OPERATING SYSTEM:
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62 FRIEKDAFGNANSARGFPVIDRMKAAVESACPRIVSCADLLIIAAQQSVTLAGGGPSWRVP 121
                                                                                                              82 -QAEKWAPPNL-TVRGFDFIDRIKSLVEAECPGVVSCADILTLAARDTIVATGGPFWKVP 139
                                                                                                                                                                122 LGRRDSLQAFLDLANANLPAPFFTLPQLKDSFRNVGLNRSSDLVALSGGHTFGKNQCRFI 181
                                                                                                                                                                                                    140 TGRRDGVVSNLTEARNNIPAPSSNFTTLQTLFANQGLD-LKDLVLLSGAHTIGIAHCSSL 198
                                                                                                                                                                                                                                                                                                                                             259 KRRGLEBSDAALLT--NSVTKAQIIQLLEGSVENFFAEFATSIEKMGRINVKTGTEGEIR 316
                                22 QLQLGFYANSCPKAEQIVLKFVHDHIHNAPSLAAALIRMHFHDCFVRGCDASVLLNSTIN 81
            QLTPTFYDNSCPNVSNIVRDTIVNELRSDPRIAASILRIHFHDCFVNGCDASILLDNTTS
                                                                                                                                                                                                                                           182 MDRLYNFSNTGLPDPTLNTTYLQTLRGL--CPLNGNLSALVDFDLRTPTIFDNKYYVNLE
                                                                                                                                                                                                                                                                     199 SNRIFNFTGKGDQDPSLDSEYAANLKAFKCTDLNKLNTTKIEMDPGSRKTFDLSYYSHVI
                                                                                                                                                                                                                                                                                                                     240 EQKGLIQSDQELFSSPDATDTIPLVRSFANSTQTFFNAFVEAMDRMGNITPLTGTQGQIR
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COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        36.8%; Score 591.5; DB 2; 39.9%; Pred. No. 4.4e-56;
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ive 62; Mismatches 116;
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Patent No. 5840558
GENERAL INFORMATION:
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NAME: JONDA: ROBERT J.
REGISTRATION NUMBER: 33.91.5
REFERENCE/DOCKET NUMBER: 1227
TELECHONE: 402-398-9000
TELEPHONE: 402-398-9005
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Matches 123; Conserv
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CLASSIFICATION:
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Fatent Wo. 6566583
GENERAL INFORMATION:
TITLE OF INVENTION: A Soybean Peroxidase Gene Family and an Assay for TITLE OF INVENTION: Detecting Soybean Peroxidase Activity
FILE REFERENCE: Soybean Peroxidase Gene Family
CURRENT APPLICATION NUMBER: US/09/207,914A
CURRENT PILING DATE: 1999-12-09
FARLIER APPLICATION UNBER: US 08/68,577
FARLIER FILING DATE: 1997-06-04
FARLIER FILING DATE: 1997-06-04
FARLIER FILING DATE: 1995-10-27
NUMBER OF SEQ ID NOS: 24
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                                                                                                                                                                                                                                                                                                                                     Length 324;
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39.9%; Pred. No. 2.1e-56;
iive 63; Mismatches 115;
                CLASSIFICATION: 536
ATTORNEY/AGENT INFORMATION:
NAME: Jondle, Robert J.
REGISTRATION NUMBER: 33,915
REFERENCE/DOCKET NUMBER: N1227-003
TELECOMMUNICATION INFORMATION:
TELEFHONE: 402-333-1550
                                                                                                                                                                                                                                                                                                                               37.0%;
      04-JUN-1997
                                                                                                                                                                                                                   324 amino acids
                                                                                                                                                  TELEFAX: 402-333-1510
INFORMATION FOR SEQ ID NO:
SEQUENCE CHARACTERISTICS:
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Matches 123; Conservative
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SEQ ID NO 11
LENGTH: 324
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FILING DATE:
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Best Local Simi
Matches 123;
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US-09-207-914-II
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22 QLQLGFYAKSCENAEQIVLKFVHDHIHNAPSLAAALIRMFFHDCFVRGCDASVLLNSTTN 81
APPLICANT: VIERLING JR, RICHARD A
TITLE OF INVENTION: A SOYBEAN PEROXIDASE GENE FAMILY AND AN
TITLE OF INVENTION: ASSAY FOR DETECTING SOYBEAN PEROXIDASE ACTIVITY
NUMBER OF SEQUENCES: 17
CORRESPONDENCE ADDRESS:
ADDRESSEE: 1125 SO. 103RD STREET
STREET: SULTE 330
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APPLICANT: Vierling Jr., Richard A.
APPLICANT: Vierling Jr., Richard A.
APPLICANT: Vierling Jr., Richard A.
TITLE OF INVENTION: Detecting Soybean Peroxidase Gene Family
TITLE OF INVENTION: Detecting Soybean Peroxidase Activity
FILE REPERENCE: Soybean Peroxidase Gene Family
CURRENT APPLICATION NUMBER: US/09/207,914A
CURRENT PILING DATE: 1998-12-09
EARLIER PILING DATE: 1998-12-06
EARLIER FILING DATE: 1997-06-04
EARLIER FILING DATE: 1995-10-27
NUMBER OF SEQ ID NOS: 24
SOPTWARE: Patentin Ver. 2.3
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Patent No. 6586583
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Matches 123; Conservative
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US-09-207-914-13
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      APPLICANT: Vierling Jr., Richard A
TITLE OF INVENTION: A SOYBEAN PEROXIDASE GENE FAMILY AND AN
TITLE OF INVENTION: ASSAY FOR DETECTING SOYBEAN PEROXIDASE ACTIVITY
NUMBER OF SEQUENCES: 19
CORRESPONDENCE ADDRESS:
ADDRESSEE: Rothwell, Figg, Ernst & Kurz
STREET: 555 lith Street NW, Suite 701 East
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NAME: Jondle, Robert J.
REGISTRATION NUMBER: 33,915
REPERENCE/DOCKET NUMBER: N1227-003
TELECOMMUNICATION:
TELEPHONE: 402-333-1550
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 SOFTWARE: WordPerfect 6.1
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/86E,577
FILING DATE: 04-UUN-1997
CLASSIFICATION: 536
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    COMPUTER READABLE FORM:
WEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: WordPerfect 6.1
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Sequence 13, Application US/08868577
Patent No. 5866695
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amino acid
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LENGTH: 324 amino acid
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CITY: Washington
STATE: DC
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ZIP: 20004
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| GenCore version 5.1.6 | GenCore version 5.1.6 (c) 1993 - 2004 Compugen Ltd. using sw model (without alignments) 988.783 Million cell updates SIA-17 NSCRNVSNIVRPLTGTGGRILMCRVVNSNS 31 (without alignments) (without alignments) ying chosen parameters: 159157 (boodata/l/paa/US05 NEW COMB.pep:* (ptodata/l/paa/US07 NEW COMB.pep:* (ptodata/l/paa/US07 NEW COMB.pep:* (ptodata/l/paa/US07 NEW COMB.pep:* (ptodata/l/paa/US07 NEW COMB.pep:* (ptodata/l/paa/US07 NEW COMB.pep:* (ptodata/l/paa/US07 NEW COMB.pep:* (ptodata/l/paa/US07 NEW COMB.pep:* (ptodata/l/paa/US08 NEW COMB.pep:* (ptodata/l/paa/ | | | 33 337.5 34 333 35 325.5 36 3245 | | | | | | ESULT 1 S-10-75 Sequen GENE | | TITLE OF INT NUMBER OF SEC CORRESPONDENCE | | CITY: IN STATE: I | DOMPD | i | OPERATIN | CURRE | APPLICAT APPLICAT PILING D | a Child | NAME: |)ana i | INFOR | | | TOPOLOGY MOLECULE TYPE | ; SEQUENCE US-10-759-602-2 | | Query Match Rest Local Similarity |
|--|--|--------------------|---------|---|---------------------------------------|----|-------|------------|--------------------------|--------------------------------------|--|--|-----------|-------------------|-----------------|--|------------------------------------|------------------------------------|----------------------------|------------------------------------|------------------------------------|-----------------|-----------------|------------------------------------|------------------------------------|-------------------------|------------------------------------|-----------------|--------------------------------------|
| GenCore version 5.1.6 opyright (C) 1993 - 2004 Compugen Ltd. n search, using sw model il 6, 2004, 18:33:17; Search time 5.975 (without alignmen 988.783 Million complete to the search time 5.975 (without alignmen 988.783 Million complete to the search time 5.975 (without alignmen 982.79) 5UNAS. 197 seqs, 19121497 residues s satisfying chosen parameters: 1591 th: 0 00000000 0 th: 200000000 0 th: 200000000 0 th: 2000000000 0 th: 20000000000 0 th: 20000000000 0 th: 2000000000000000000000000000000000000 | in - protein search, using sw model April 6, 2004, iE:33:17; Search time 5.975 score: 1608 : Million: 988.783 Million: 0 score: 1608 : Million: 1639.78 Million: 0 Be seq length: 0 Be seq length: 0 Be seq length: 0 Be seq length: 0 Be seq length: 0 Be seq length: 0 Be seq length: 0 Be seq length: 0 Be seq length: 0 Cessing: Minimum Match 0% Miximum Match 0% Miximum Match 0% I. ferri 6/prodata/I/paa/USOR NEW_COMB.pep: 6 Compact 6/prodata/I/paa/USOR NEW_COMB.pep: 7 I. ferri 6/prodata/I/paa/USOR NEW_COMB.pep: 6 Compact 6/prodata/I/paa/USOR NEW_COMB.pep: 6 Compact 6/prodata/I/paa/USOR NEW_COMB.pep: 7 I. ferri 6/prodata/I/paa/USOR NEW_COMB.pep: 6 Compact 6/prodata/I/paa/USOR NEW_COMB.pep: 7 I. ferri 6/prodata/I/paa/USOR NEW_COMB.pep: 6 Compact 6/prodata/I/paa/USOR NEW_COMB.pep: 7 I. ferri 6/prodata/I/paa/USOR NEW_COMB.pep: 6 Compact 6/prodata/I/paa/USOR NEW_COMB.pep: 7 I. ferri 6/prodata/I/paa/USOR NEW_COMB.pep: 7 I. ferri 6/prodata/I/paa/USOR NEW_COMB.pep: 6 Compact 6/prodata/I/paa/USOR NEW_COMB.pep: 7 II. ferri 6/prodata/I/paa/USOR NEW_COMB.p | | | Seconds updates/ | Э | | | | | | | have a ng printed, 1. | | iption | 10 | 45 | 40 | 39 | 46 | 446 | 44 | 446 | 463 | 513 | 396 | 558 | 406 365 | 577 | 575 |
| Search, using sw model | Gencore version Gencore version (c) 1993 - 2004 (c) 1993 - 200 | 1.6 mpugen Ltd. | | 5.97 grame ion | . PLTGTQGQIRLNCRV | | | | | | W COMB. Dep:* UEW COMB. Dep:* EEW COMB. Dep:* EEW COMB. Dep:* EEW COMB. Dep:* EEW COMB. Dep:* EEW COMB. Dep:* | ed by chance to if the result be: ore distribution | | Desci | | | | | | | | | | | | | | | |
| In search, usi In search, usi In search, usi In search, usi In search, usi In search, usi In search, usi In search, usi In search, usi In search, usi In search, usi In search | ss score: 1 table: 1 cable: rsion - 2004 | æ | 15 | SNIVR | 0. | | | 0 | % 00% 5 summaries | AA New:* ata/l/paa/PCT Ni ata/l/paa/US06_1 ata/l/paa/US07_1 ata/l/paa/US08_1 ata/l/paa/US08_1 ata/l/paa/US08_1 | results predi 1 to the score of the total | SUMMARIES | qi | US-10-759-602-2 | US-10-767-701-4 US-10-767-701-4 | US-10-767-701-4 US-10-767-701-4 | US-10-767-701-3 US-10-767-701-4 | US-10-767-701-4 | US-10-767-701-4 US-10-767-701-4 | US-10-767-701-4 US-10-767-701-4 | US-10-767-701-4 | US-10-767-701-4 | US-10-767-701-5 US-10-767-701-4 | US-10-767-701-3 US-10-767-701-5 | US-10-767-701-5 | US-10-767-701-4 US-10-767-701-3 | US-10-767-701-5 | US-10-767-701-5 |
| | ss score: 1 table: 1 cable: | search, | 6, | -09-246-451A-1 08 @LTPTFYDNSCPN | • | seds, | satisfying | tth: 0 jth: 200000000 | Match Match first | nding_Patents /cgn2_6/ptod /cgn2_6/ptod /cgn2_6/ptod /cgn2_6/ptod /cgn2_6/ptod /cgn2_6/ptod | the number of than or equa by analysis | | Length | 333 6 | 3.25 3.25 3.25 3.25 3.25 3.25 3.25 3.25 | 347 6 314 6 | 337 6 | 377 6 | 357 6 | 338 6 209 6 | 341 6 | 347 6 | 401 6 | 230 6 | 200 6 | 155 6 210 6 | 354 6 | 204 |

| Sequence 42579, A Sequence 12700, A Sequence 34317, A Sequence 51756, A Sequence 51756, A Sequence 51751, A Sequence 57979, A Sequence 51813, A Sequence 51813, A Sequence 51813, A Sequence 51813, A Sequence 51813, A Sequence 51813, A Sequence 51813, A Sequence 51813, A Sequence 51813, A Sequence 51813, A Sequence 51813, A Sequence 51818, A Sequence 5188, A Sequence 5188, A Sequence 5188, A Sequence 5188, A Sequence 5188, A Sequence 5188, A Sequence 5188, A Sequence 5188, A Sequence 5188, A Sequence 5188, A Sequence 5188, A Sequence 5188, A Sequence 5188, A Sequence 5188, A Sequence 5188, A Sequence 5188, A Sequence 5188, A Sequence 5188, A Sequence 5188, A | | ansgenic Plants | Length 333, Indels 3; Gaps 2; |
|---|------------|--|---|
| 27 359.5 22.4 216 6 US-10-767-701-42579 29 351 21.8 6 US-10-767-701-32760 30 349 21.7 346 US-10-767-701-3576 31 346.5 21.7 349 COLORADO 32 33.9 21.1 153 6 US-10-767-701-45520 34 37.5 21.0 157 6 US-10-767-701-51756 34 21.0 157 6 US-10-767-701-5181 US-10-767-701-35620 35 32.5 20.2 144 6 US-10-767-701-36220 36 324 20.1 144 6 US-10-767-701-36220 37 313.5 19.5 198 6 US-10-767-701-45667 39 306.5 19.0 186 US-10-767-701-45667 40 305.5 19.0 186 US-10-767-701-45667 40 305.5 19.0 186 US-10-767-701-4368 41 305. 19.0 | ALIGNMENTS | NUMBER OF SECURNIAN SECURIARY SEQUENCE 2, APPLICATION US/10759602 Sequence 2, APPLICATION US/10759602 GENERAL INFORMATION: APPLICANT: AANIEV, Michael Armstrong, Katherine Belmar, Scott Polkerts, Otto Hopkins, Micole Menke, Xichael A. Pareddy, Dayakar Petolino, Joseph F. Smith, Kelley, Aaron TITLE OF INVENTYON: Regulatory Sequences for Tr NUMBER OF SECURNES: 59 CORRESPONDENCE ADDRESS: ADDRESSED DOMAGTOSCIENCE ILC STREET: 9330 Zionsville Road CULY: Indianapolis STADE: Indianapolis STADE: Indianapolis STADE: Indianapolis COMPUTER: IBM PC COMPUTED: IN 4008 MS COMPUTER: IBM PC COMPUTED: OF STATE: IN 600 COMPUTED: OF STATE: PATENTIN Release #1.0, Version #1.0, Version #1.0, VERSION MEDIUM TYPE: Floppy disk COMPUTER: Radballs Porm: CURRENT OF SYSTEM: POLOS/MS-DOS CURRENT APPLICATION NUMBER: US/10/759,602 FLING DATE: APPLICATION NUMBER: US/10/759,602 FLING DATE: APPLICATION NUMBER: US/10/759,602 FLING STATE: 10-Jan-2004 FLING STA | Query Match Best Local Similarity 49.7%; Pred. No. 2.7e-68; Matches 152; Conservative 52; Mismatches 99; In |
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RESULT 9
US-10-767-751-44615

SGRUENCE 46615, Application US/10767701

SGRUENCE 46615, Application US/10767701

GENERAL INFORMATION:

APPLICANT: Kovalic, David K.

APPLICANT: Kovalic, David K.

APPLICANT: Cao, Yongwal

TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With

TITLE OF INVENTION: Plants and Uses Thereof For Plant Improvement

FILE REFERENCE: 38-21(53525)8

CURRENT APPLICATION NUMBER: US/10/77,701

CURRENT FILING DATE: 2004-01-29

SEQ. ID NOS: 63128

SEQ. ID NO 44615

LENGTH: 315
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GENERAL INFORMATION:
APPLICANT: Kovalic, David K.
APPLICANT: Zhou, Yihua
APPLICANT: Cao, Yongwei
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
                                                                                 330 --SFSKRLFPDQDPTLNKFFRGQLYGTCFTDTTVNTTVN-DIRTPNTFDNKYYDDLLNRQ 286
                                                                                                                                                                  GLIQSDQELFSSPDATDTIPLVRSFANSTQTFFNAFVEAMDRMGNITPLIGTQGQIRLNC 302
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               62 FRIEKDAFGNANSARGFPVIDRMKAAVESACPRIVSCADLLIIAAQQSVTLAGGPSWRVP 121
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                122 LGRRDSLQAFLDLANANLPAPFFTLPQLKDSFRNVGLNRSSDLVALSGGHTFGKNQCRFI 181
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    182 MDRLYNFSNTGL2DPTLNTTYLQTLRGLCPLNGNLSALVDFDLRTPT1FDNKYYVNLEEQ 241
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                LGRRDSTASF-PSETTDLPAPISSLQQLLSLFSNKNLD-ATDMVALSGAHIIGQAQCSNF 213
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                8
             176 DGLAAASNAAVLAALPSPTSTVPTLLSFLSKINLD-VTDLWALSGGHTVGVAHCS----
                                                         185 LYNFSNIGLP--DPTLNTTYLQTLRGICFLNGNLSALVDFDLRTPTIFDNKYYVNLEBQK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          2 QLTPTFYDNSCPNVSNIVRDTIVNELRSDPRIAASILRLHFHDCFVNGCDASILLDNTTS
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             13;
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               ; OTHER INFORMATION: Clone ID: SORBI-28XAY03-C56139_1.pep
US-10-767-701-44615
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   DB 6;
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OTHER INFORMATION: unsure at all Xaa locations
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Best Local Similarity 45.81
Matches 119; Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                TYPE: PRT
ORGANISM: Sorghum bicolor
                                                                                                                                                                                                                                                                   344 SARNAGA 350
                                                                                                                                                                                                                         RVVNSNS 309
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GENERAL INFORMATION:
APPLICANT: Kovalic, David K.
APPLICANT: Zhou, Yihua
APPLICANT: Cao, Yongwei
TILLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated Kith
FILE REPERENCE: 38-21(53535)
CURRENT APPLICANT: 2004-01-29
CURRENT FILING DATE: 2004-01-29
NUMBER OF SEQ ID NGS: 63128
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                                                                                                                                                                                                                                                                                                                                                           67 DAFGNANSARGFPVIDRMKAAVBSACPRTVSCADLLTIAAQQSVTLAGGPSWRVPLGRRD 126
                                                                                                                                                                                                                                                                                                                                                                                     149 GRVSNATQAINNLPPPFFFNATQIVDRFASKNLT-LEDMVVLSGAHTLGVSHCSFAGPAN 207
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        VNLEEQKGLIQSDQELFSSPDATDTIPLVRSFANSTQTFFNAFVEAMDRMGNITPLTGTQ 295
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         267 VGLTNNLGLFESDAALLTNATMK---ALVDSFVRNETTWRKFARSMVKMGKIEVLTGTQ 323
                                                                                                                                                                                                                                                                                       99
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 116 LSPPNLTLRPAAFKAINDIRARLEQACGRVVSCADITALAARESVALGGGPAYKVPLGRR 175
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        DSLQAFLJLA-NANLPAPFFTLPQLKDSFRNVGLRRSSDLVALSGGHTFGKNQCRFIMDR 184
                                                                                                                                                                                                                                                                                                                                                                                                                                            127 SLQAFLDLANANLPAPFFTLPQLKDSFRNVGLNRSSDLVALSGGHTFGKNQCRF----
                                                                                                                                                                                                                                                                         7 FYDNSCPNVSNIVRETIVNELRSDPRIAASILRLHFHDGFYNGCDASILLDNTTSFRTEK
                                                                                                                                                                                                                                                                                                             FYNKTCPSAESIVÇÇTVAAAFGNSSGVAPALIRMHFHDCFVRGCDGSVLIDSTANNTAEK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              IMDRLYNFSNT--GLPDPTLNTTYLQTLRGLCPLNGNL---SALVDFDLRTPTIFDNKYY
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 PYDNSCPNVSNIVRDIIVNELRSDPRIAASILRLHFHDCFVNGCDASILLDNTISFRIEK
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     16;
                                                                                                                                                                                               Length 357;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                Query Match
38.0%; Score 611; DB 6; Length 377;
Best Local Similarity 43.3%; Pred. No. 1.2e-52;
Matches 133; Conservative 55; Mismatches 103; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       =
                                                                                                                                                                                        38.9%; Score 625; DB 6; Length 35
42.7%; Pred. No. 4.8e-54;
ive 48; Mismatches 116; Indels
                                                                                                                        ; OTHER INFORMATION: Clone ID: SORBI-28MAY03-C17434_1.pep
US-10-767-701-46170
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US-10-767-701-46411
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GEIRRNCRVINPAS 337
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  GQIRLNCRVVNSNS 309
NUMBER OF SEQ ID NOS: 63128
SEQ ID NO 46170
LENGTH: 357
                                                                                                                                                                                                                                Matches 134; Conservative
                                                                               ORGANISM: Scrghum bicolor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT
ORGANISM: Sorghum bicolor
                                                                                                                                                                                                            Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     RESULT 8
US-10-767-701-46411
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LENGTH: 377
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Best Local (
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Other Molecules Associated With
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GENERAL INFORMATION.
GENERAL INFORMATION.
GENERAL INFORMATION.
GENERAL INFORMATION.
APPLICANT: Zhou, Yihua
APPLICANT: Cao, Yongwei
TITLE OF INVENTION Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof For Plant Improvement
FILE REFERENCE: 38-21(53535)B
CURRENT APPLICATION NUMBER: US/10/767,701
CURRENT FILING DATE: 2004-01-29
NUMBER OF SEQ ID NOS: 63128
                                                                           118 WRVPLGRRDSLQAFLDLANANLPAPFFTLPQLKDSFRNVGLNRSSDLVALSGGHTFGKNQ 177
                                                                                                         157 FAMPSGRLDGRVSNASBATANLPPASFNLTQLLARFASKNLT-ADDLVTLSGAHSIGRSH 215
                                                                                                                                                                                                                                                                                    269 YYSNVATHEVVFGSDQAL---GDRNDTAALVALYAANRXIWSQKFAAAMVKMGSIEVLTG 325
                                97 TPGNRTVEKTSQPNFPSLRGFSVINRAKRVVERRCPGTVSCADIVAFAARDAARIMGGIR 156
                                                                                                                                                                                                            216 ČS-----SPANTRLYPQEDATLNVILAARLRAKČPAAPGGKDRVVDLDFRTPLQLDNQ 268
                                                                                                                                                                 178 CRFIMDRLYNFSNTGL---PDPTLNTTYLCTLRGLCP-LNGNLSALVDFDLRTPTTFDNK 233
                                                                                                                                                                                                                                                        234 YYVNLEECKGLIQSDQELFSSPDATDTIPLVRSFANSTQTFFNAFVEAMDRMGNITPLTG 293
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              63 RIEKDAFGNANSARGFPVIDRMKAAVESACPRIVSCADILIIAAQQSVILAGGPSWRVPL 122
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          3 LIPTFYDMSCPNVSNIVRDTIVNELRSDPRIAASILRLHFHDCFVNGCDASILLDNTTSF
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     123 GRRDSLQAFLDLAMANLPAPFFTLPQLKDSFRNVGLNRSSDLVALSGGHTFGKNQC 178
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     APPLICANT: Zhou, Yihua APPLICANT: Zhou, Yihua APPLICANT: Zhou, Yihua APPLICANT: Zhou, Yongwei TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules AssititLE OF INVENTION: Plants and Uses Thereof For Plant Improvement FILE REFERENCE: 38-21 (53535) B CURRENT APPLICATION NUMBER: US/10/767,751 CURRENT FILING DATE: 2004-01-29 NUMBER OF SEQ ID NOS: 63128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            Length 209;
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US-10-767-701-42477
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       . Score 503.5; DB 6;
Pred. No. 2.3e-42;
31; Mismatches 48;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        Sequence 42477, Application US/10767701
GENERAL INFORMATION:
APPLICANT: Kovalic, David K.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         31.3%;
                                                                                                                                                                                                                                                                                                                                               294 TOGOIRINCRVVN 306
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ORGANISM: Sorghum bicolor
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Best local Similarity
                                                                                                                                                                                                                                                                                                                                                                                                                                                             RESULT 12
US-10-757-701-42477
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APPLICANT: Zhou, Yihua
APPLICANT: Zhou, Yihua
APPLICANT: Cao, Yongwa
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof For Plant Improvement
FILE REPRENCE: 38-21(55535)3
CURRENT APPLICATION NUMBER: US/10/767,701
CURRENT FILING DATE: 2004-01-29
NUMBER OF SEQ ID NOS: 63128
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              61 SERIEKDAFGNANSARGFPVIDRYKAAVESACPRIVSCADLLIIAAQQSVILAGGPSWRV 120
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  153
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        L54 PAGRRDGRVSNETEADINLLGPDSTAQVLIJGFRRKNLT-VEDMYVLSGSHTIGRSHCAS 212
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      269 PINIGLHFSDDQLIRN---ATLAPLANFAADETLWKQKFAAAMYGMSNIDVKTGTIDEI 325
                                                                                                                                                                                                                                                                                                                                                                                                       2 QUIPTEYDNSCPNVSNIVRDIIVNELRSDPRIAASIIRIHFHDCFVNGCDASIILD-NTT 60
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 62 F---RT-EKDAFGNANSARGFPVIDRMKAAVESACPRTVSCADLLTIAAQQSVTLAGGPS 117
                                                                                                                                                                                                                                                                                                                                                                                                                                        94 GGNTERQSRANNPSLRGFDVIDAAKAAVERSCPRTVSCADIVAFAARDSVNLTGKLFYQV
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        181 IMDRLYNFSNTGLPDPTLNTTYLQTERGLCPIN-GNLSA-LVDFDLRTPTIFDNKYYVML
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   239 EEQKGLIQSDQELFSSPDATDTIPLVRSFANSTQTFFKAFVEAMDRMGNITPLIGTQGQI
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                         For Plant Inprovement
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US-10-767-701-43455
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                                                                                                                                                                                                                                                                                                              33.9%; Score 544.5; DB 6;
40.8%; Pred. No. 4.4e-46;
tive 38; Mismatches 135;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      32.3%; Score 519.5; DB 6; 39.9%; Pred. No. 1.2e-43;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   41; Mismatches 128;
FILE REFERENCE: 38-21 (53555; B CURRENT APPLICATION NUMBER: US/10/767,701 CURRENT FILING DATE: 2004-01-29 SEQ ID NOS: 63128 LENGTH: 357
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    Sequence 44200, Application US/10767701 GENERAL INFORMATION:
                                                                                                                                                                                                                                                                                                              Query Match
Best Local Similarity 40.8%
Matches 127; Conservative
                                                                                                                                                                                                ORGANISM: Sorghum bicolor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                125; Conservative
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ORGANISM: Sorghum bicolor
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Matches 125; Conserv
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APPLICANT: Zhou, Yihua
APPLICANT: Zhou, Yihua
APPLICANT: Zhou, Yihua
APPLICANT: Cao, Yongwel
TITLE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
TITLE OF INVENTION: Plants and Uses Thereof For Plant Improvement
FILE REFERENCE: 38-21 (53535) B
FURE REFERENCE: 38-21 (53535) B
CURRENT PALLICATION NUMBER: US/10/767,701
CURRENT FILING DATE: 2004-01-29
NUMBER OF SEQ ID NOS: 63128
                                                                                                                                                                                                                                                                                                              TAAPERAAEINLSLEGDAFDAVARAKAALESACPSWYSCADVLALAARDLVGILGGPRFP 155
                                                                                                                                                                                                                                                                                         VPLGRRDSLQAFIDLANANLPAPFFTLPQIKDSFRYTGINRSSDLVALSGGHTFGKNQCR 179
                                                                                                                                                                                                                                                                                                                                                           FINDRLYNFSNTGLP--DPTLNTTYLQTLRGLCP-LNGNLSALVDFDLRTPTIFDNKYYV 236
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          103 TIAAQQSVTLAGGPSWRVPLGRRDSLQAFLDLANANLPAPFFTLPQLKDSFRNVGLNRSS 162
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                                                                                                                      Gaps
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                                                                                      Length 341;
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44.5%; Pred. No. 8.2e-41;
tive 29; Mismatches 104; Indels
                                                                                  ; Score 490.5; DB 6; Length
; Pred. No. 9e-41;
48; Mismatches 134; Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                ; CTHER INFORMATION: Clone ID: SORBI-28MAY03-C61249_1.pep
US-10-767-701-35185
                ; FEATURE:
; OTHER INFCRMATION: Clone ID: SORBI-28MAY03-C7853_1.pep
US-10-767-701-44634
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      Seguence 35185, Application US/10767701 GENERAL INFORMATION:
                                                                                 Query Match
Best Local Similarity 37.6%;
Matches 115; Conservative 46
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ORGANISM: Sorghum bicolor
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Best Local Similarity
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US-10-767-701-35185
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LENGTH: 251
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Sequence 46344, Application US/10767701

GENERAL INFORMATION:
APPLICANT: Zhou, Yihua
APPLICANT: Zhou, Yihua
APPLICANT: Zhou, Yihua
ITILE OF INVENTION: Nucleic Acid Molecules and Other Molecules Associated With
ITILE OF INVENTION: Plants and Uses Thereof For Plant Improvement
ITILE OF INVENTION: 188-21 (53555) B
CURRENT APPLICATION NUMBER: US/10/77,701

CURRENT FILING DATE: 2004-01-29
171 D-RISTRFDIVYYRELQMRRGLLSSDQTLFESP---ETKGIVNMFAMNDAYFFYAFDQGM 226
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                256 PAVFDNLYFIELTIKKNKGVMLPSDQGLATDP---RISWLVÇGFADNHWWFFDQFGTSMV 312
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           227 PTIFDNKYYV--NLEEQKG-LIQSDQELFSSPDATDTIPLVRSFANSTQTFFNAFVEAMD 283
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           2 QLTPTFYDNSCPNYSNIVRDIIVNELRSDPRIAASILRIHFHDCFVNGCDASILLDNTTS 61
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            111 TLAGGPSWRVPLGRRDSLQAFLDLANAN----LPAPFFTLPQLKDSFRNVGLNRSSDLVA
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    167 LSGGHTFGKNQCRFIMDRLYNFSNTGLFDPTLNTTYLQTLRGLCPLNGNLSALVDFDLRT
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                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         Length 347;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           Indels
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        OTHER INFORMATION: Clone ID: SORBI-28MAY03-C9288_1.pep
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      29.1%; Score 468; DB 6; D
35.6%; Pred. No. 1.6e-38;
iive 53; Mismatches 107;
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      284 RMGNITPLIGIQGQIRINCRVVNSNS 309
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  KMSQLKGPQGNVGEIRRNCLRPNTNS 338
                                                                                      227 LKMGQLDLKEGDEGEIRHTCGVINS 251
                                                     283 DRMGNITPLIGIDGQIRLNCRVVNS 307
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         6, 2004, 19:11:36
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     FRIEKDAFGNANSARGFP
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      NUMBER OF SEQ ID NOS: 63128
SEQ ID NO 46344
LENGTH: 347
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Best Local Similarity 35.6
Matches 116, Conservative
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       TYPE: PRT ORGANISM: Sorghum bicolor
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   completed: April
                                                                                                                                                                                                                 US-10-767-701-46344
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              US-10-767-701-46344
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